

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 4856 Seconds
(without alignments)
10300.219 Million cell updates/sec

Title: US-09-904-584-1
Perfect score: 1154
Sequence: 1 atggaaccccgatccagat.....ccagatgactagtcgtgga 1154

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 500 summaries

Database :

GenEmbl:

- 1: gb_ba:*
- 2: gb_hg:*
- 3: gb_in:*
- 4: gb_om:*
- 5: gb_ov:*
- 6: gb_pat:*
- 7: gb_ph:*
- 8: gb_pl:*
- 9: gb_pr:*
- 10: gb_ro:*
- 11: gb_sts:*
- 12: gb_sy:*
- 13: gb_un:*
- 14: gb_vi:*
- 15: em_ba:*
- 16: em_fun:*
- 17: em_hum:*
- 18: em_in:*
- 19: em_mu:*
- 20: em_om:*
- 21: em_or:*
- 22: em_ov:*
- 23: em_pat:*
- 24: em_ph:*
- 25: em_pl:*
- 26: em_ro:*
- 27: em_sts:*
- 28: em_un:*
- 29: em_vi:*
- 30: em_hg_hum:*
- 31: em_hg_inv:*
- 32: em_hg_mus:*
- 33: em_hg_other:*
- 34: em_hg_pln:*
- 35: em_hg_rcd:*
- 36: em_hg_mam:*
- 37: em_hg_vrt:*
- 38: em_sy:*
- 39: em_hgo_hum:*
- 40: em_hgo_mus:*
- 41: em_hgo_other:*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	1154	100.0	1154	9	HSU17298	U17298 Homo sapien
2	1154	100.0	1604	9	HUMOPRK1B	L37362 Homo sapien
3	1146	99.3	1182	6	AX270854	AX270854 Sequence
4	1146	99.3	1182	6	AX548862	AX548862 Sequence
5	1146	99.3	1182	6	AX774764	AX774764 Sequence
6	1146	99.3	1182	9	HSU11053	U11053 Homo sapien
7	1143	99.0	1143	6	AR281679	AR281679 Sequence
8	1142	99.0	1142	6	A48343	A48343 Sequence 1
9	1142	99.0	1142	6	AR141371	AR141371 Sequence
10	1139.8	98.8	1143	9	AF498922	AF498922 Homo sapi
11	1137.8	98.6	1284	6	AR281680	AR281680 Sequence
12	1131.8	98.1	1143	6	AX280919	AX280919 Sequence
13	1058.4	91.7	1396	9	AY168006	AY168006 Homo sapi
14	1001	86.7	1275	6	AR281681	AR281681 Sequence
15	996.2	86.3	1275	6	AR281682	AR281682 Sequence
16	932.2	80.8	1733	10	CPU04092	U04092 Cavia porce
17	914	79.2	1273	10	RATROD	D16534 Rattus norv
18	914	79.2	1358	10	RATKOR1A	L22001 Rat kappa o
19	912.4	79.1	4742	10	RNU00442	U00442 Rattus norv
20	910.8	78.9	1288	10	S81111	S81111 kappa-opioi
21	910.8	78.9	1408	6	A68828	A68828 Sequence 5
22	910.8	78.9	1408	6	AR409589	AR409589 Sequence
23	910.8	78.9	1410	6	AR105149	AR105149 Sequence
24	910.8	78.9	1410	6	AR178399	AR178399 Sequence
25	910.8	78.9	1410	10	MUSKAPOPRE	L11065 Mouse kappa
26	910.8	78.9	2094	10	RATKOR1B	L22536 Rattus norv
27	910.8	78.9	2481	6	E08874	E08874 cDNA coding
28	910.8	78.9	2481	10	RATKOR	D16829 Rattus norv
29	871.2	75.5	1000	6	AR105156	AR105156 Sequence
30	871.2	75.5	1000	6	AR178406	AR178406 Sequence
31	833.8	54.9	757	4	PIGKOR	L19437 Sus scrofa
32	591.8	51.3	715	4	AF012105	AF012105 Sus scrof
33	546	47.3	179356	2	AC083844	AC083844 Homo sapi
34	546	47.3	183519	9	AC009646	AC009646 Homo sapi
35	510.6	44.2	1454	5	AF530573	AF530573 Rana pipi
36	488.2	42.3	1477	5	AF285173	AF285173 Dario rer
37	451	39.1	1387	5	AF132813	AF132813 Dario rer
38	448	38.8	2135	6	AR148257	AR148257 Sequence
39	448	38.8	2135	10	RATMOOR1A	L20684 Rattus norv
40	448	38.8	2397	10	RATROB	D16349 Rattus norv
41	446.4	38.7	1401	10	RATMOPIOD	L22455 Rat mu opio
42	446.4	38.7	1448	10	RNU02083	U02083 Rattus norv
43	446.4	38.7	1596	10	RATMORA	L13069 Rattus norv
44	446.4	38.7	1618	6	AR106013	AR106013 Sequence
45	446.4	38.7	1618	6	AR106014	AR106014 Sequence
46	446.4	38.7	1618	6	AR153354	AR153354 Sequence
47	446.4	38.7	1618	6	AR153355	AR153355 Sequence
48	445.8	38.6	1231	5	CCMUOPI	Y10904 C.commerson
49	444.8	38.5	1367	10	RNU35424	U35424 Rattus norv
50	436.2	37.8	1464	9	AY036622	AY036622 Homo sapi
51	434.8	37.7	1388	9	AY036623	AY036623 Homo sapi
52	434.8	37.7	1610	6	AR106017	AR106017 Sequence
53	434.8	37.7	1610	9	HUMOP10IDA	L29301 Homo sapien
54	434.8	37.7	2160	6	AR162044	AR162044 Sequence
55	434.8	37.7	2162	6	A87781	A87781 Sequence 7
56	434.8	37.7	2162	6	AR181331	AR181331 Sequence
57	434.8	37.7	2162	6	AR182295	AR182295 Sequence
58	434.8	37.7	2162	6	AR270816	AR270816 Sequence
59	434.8	37.7	2162	6	AR301230	AR301230 Sequence
60	434.8	37.7	2162	6	AX548900	AX548900 Sequence
61	434.8	37.7	2162	9	HUMMOR1X	L25119 Human mu op
62	433.2	37.5	1473	9	HSU12569	U12569 Rattus norv
63	432.6	37.5	1366	10	RNU00475	U00475 Rattus norv
64	432.6	37.5	1418	10	RATROA	D16348 Rattus norv
65	432.6	37.5	1438	10	AF346812	AF346812 Mus muscu

66	432.4	37.5	1332	10	AF346813	AF346813 Mus muscu	139	394.2	34.2	2205	4	SSU72758	U72758 Sus scrofa
67	432.4	37.5	1334	6	AR269386	AR269386 Sequence	140	393.4	34.1	1113	9	AY268428	AY268428 Homo sapi
68	432.4	37.5	1334	10	AF074973	AF074973 Mus muscu	141	393.4	34.1	1379	9	AF348323	AF348323 Homo sapi
69	432.4	37.5	1346	10	AF167566	AF167566 Mus muscu	142	393.4	34.1	1805	6	AX746239	AX746239 Sequence
70	432.4	37.5	1365	6	AR269394	AR269394 Sequence	143	393.4	34.1	1973	6	AR370828	AR370828 Sequence
71	432.4	37.5	1365	10	AF167565	AF167565 Mus muscu	144	393.4	34.1	1973	6	AR380872	AR380872 Sequence
72	432.4	37.5	1373	10	AY160190	AY160190 Mus muscu	145	393.4	34.1	1973	9	HSORL1	X77130 H. sapiens m
73	432.4	37.5	1423	6	AR269384	AR269384 Sequence	146	393.4	34.1	2534	6	AX548923	AX548923 Sequence
74	432.4	37.5	1423	10	AF062753	AF062753 Mus muscu	147	393.4	34.1	2534	9	HSU30185	U30185 Human orpha
75	432.4	37.5	1440	10	AF260306	AF260306 Mus muscu	148	393.4	34.1	3420	9	BC038433	BC038433 Homo sapi
76	432.4	37.5	1440	10	AF400246	AF400246 Mus muscu	149	391.8	34.0	1113	6	AX280917	AX280917 Sequence
77	432.4	37.5	1500	10	AF346814	AF346814 Mus muscu	150	387.6	33.6	1082	6	AF260311	AF260311 Mus muscu
78	432.4	37.5	1543	10	AF074974	AF074974 Mus muscu	151	387.6	33.6	1238	6	AR269385	AR269385 Sequence
79	432.4	37.5	1569	10	AF260308	AF260308 Mus muscu	152	387.6	33.6	1239	10	AF062755	AF062755 Mus muscu
80	432.4	37.5	1569	10	AF400248	AF400248 Mus muscu	153	387.6	33.6	1257	6	AR269388	AR269388 Sequence
81	432.4	37.5	1610	6	AR269399	AR269399 Sequence	154	387.6	33.6	1258	10	AF074972	AF074972 Mus muscu
82	432.4	37.5	1610	10	MMU26915	U26915 Mus musculus	155	387	33.5	1174	10	AF260309	AF260309 Mus muscu
83	432.4	37.5	1614	10	AF260307	AF260307 Mus muscu	156	385.8	33.4	1133	10	AF260310	AF260310 Mus muscu
84	432.4	37.5	1614	10	AF400247	AF400247 Mus muscu	157	385	33.4	1064	9	AY195733	AY195733 Homo sapi
85	432.4	37.5	1695	10	AY036621	AY036621 Mus muscu	158	384.6	33.3	1225	5	AF530572	AF530572 Rana pipi
86	432.4	37.5	1729	6	AR269392	AR269392 Sequence	159	383.2	33.2	1252	9	HUMORPLP	LA0949 Homo sapien
87	432.4	37.5	1729	10	AF167568	AF167568 Mus muscu	160	377.6	32.7	1104	10	AY152731	AY152731 Rattus norv
88	432.4	37.5	2045	6	AR269393	AR269393 Sequence	161	377.6	32.7	1253	10	RATOPRE	L29419 Rattus norv
89	432.4	37.5	2045	10	AF167567	AF167567 Mus muscu	162	377.6	32.7	1567	6	AR106024	AR106024 Sequence
90	432.4	37.5	2137	10	AB047546	AB047546 Mus muscu	163	377.6	32.7	1567	10	RATOPRECEP	L28144 Rat oploid
91	431.6	37.4	1182	6	AX280923	AX280923 Sequence	164	377.6	32.7	1817	10	RATORC	D16438 Rattus norv
92	431.6	37.4	1203	6	AX280921	AX280921 Sequence	165	377.6	32.7	2354	10	RNU07871	U07871 Rattus norv
93	431.6	37.4	1399	9	AY038989	AY038989 Macaca fa	166	377.6	32.7	2706	6	AR031258	AR031258 Sequence
94	430.8	37.3	2229	6	AE8824	AE8824 Sequence 1	167	377.6	32.7	2706	6	AR095997	AR095997 Sequence
95	430.8	37.3	2229	6	AR409587	AR409587 Sequence	168	377.6	32.7	2706	10	RATXOR1A	L33916 Rattus norv
96	430.8	37.3	2229	10	MMU19380	U19380 Mus musculus	169	377	32.7	1421	5	AF530571	AF530571 Rana pipi
97	430.6	37.3	1186	10	S7786883	S77872 kappa opioi	170	376	32.6	1304	10	RNU01913	U05239 Rattus norv
98	430.6	37.3	68339	2	AC103663_3	Continuation (4 of	171	376	32.6	1452	10	RNU01913	U01913 Rattus norv
99	430.6	37.3	110000	2	AC103663_2	Continuation (3 of	172	369.8	32.0	2858	10	CPU04369	U04369 Cavia porce
100	430.6	37.3	110000	2	AC134788_0	AC134788 Mus muscu	173	369.4	32.0	2894	10	BC051982	BC051982 Mus muscu
101	430.6	37.3	263462	2	AC124029	AC124029 Mus muscu	174	368	31.9	1452	6	AR048198	AR048198 Sequence
102	430.4	37.3	432	9	HUMKOR3	L36130 Homo sapien	175	368	31.9	1452	6	AR048592	AR048592 Sequence
103	430	37.3	1203	9	AF286024	AF286024 Macaca mu	176	368	31.9	1452	6	AR058215	AR058215 Sequence
104	430	37.3	1881	4	PIGMUOPR	L38645 Sus scrofa	177	368	31.9	1452	6	AR166168	AR166168 Sequence
105	429.2	37.2	1542	6	AR269387	AR269387 Sequence	178	368	31.9	1452	6	I62296	I62296 Sequence 3
106	429.2	37.2	1981	6	AR746236	AR746236 Sequence	179	368	31.9	1452	6	AS214042	AS214042 Sequence
107	427.6	37.1	1710	10	AY166606	AY166606 Cavia por	180	367.8	31.9	1079	10	MMU14155	U14155 Mus musculus
108	425.8	36.9	4048	10	RNKOR3	U17995 Rattus norv	181	367.8	31.9	1134	6	AR404125	AR404125 Sequence
109	425.8	36.9	257246	2	AC094764	AC094764 Rattus norv	182	367.8	31.9	1134	9	AF126470	AF126470 Homo sapi
110	425.8	36.9	315342	2	AC112396	AC112396 Rattus no	183	367.8	31.9	1330	6	AR105151	AR105151 Sequence
111	425.6	36.9	638	10	D3166383	D31665 Mus musculus	184	367.8	31.9	1330	6	AR178401	AR178401 Sequence
112	425.2	36.8	1881	4	AF521309	AF521309 Sus scrof	185	367.8	31.9	1338	10	MMU04952	U04952 Mus musculus
113	424	36.7	1415	4	BTU89677	BTU89677 Bos tauru	186	367.8	31.9	2024	10	MMOPRECP	X91813 M. musculus
114	422.6	36.6	1829	6	AR086615	AR086615 Sequence	187	367.8	31.9	2600	6	AR437561	AR437561 Sequence
115	422.6	36.6	1829	6	AR746228	AR746228 Sequence	188	367.8	31.9	2934	10	BC050885	BC050885 Mus muscu
116	422.6	36.6	1834	10	S65335	S65335 Mus sp. del	189	366.2	31.7	2600	6	AX418278	AX418278 Sequence
117	422.6	36.6	1835	10	MUSDPORCP	L07271 Mouse delta	190	366.2	31.7	2600	10	MMU09421	U09421 Mus musculus
118	422.6	36.6	2203	10	S66181	S66181 delta opiat	191	357	30.9	1177	6	AR404124	AR404124 Sequence
119	422.6	36.6	2218	6	AE8896	AE8896 Sequence 3	192	357	30.7	1177	9	AF115266	AF115266 Homo sapi
120	422.6	36.6	2218	6	AR409588	AR409588 Sequence	193	354.2	30.7	455	9	HUMOPRKL	L26079 Homo sapien
121	422.6	36.6	2219	6	AR38528	AR38528 Sequence 1	194	344.8	29.9	2600	6	AR004660	AR004660 Sequence
122	422.6	36.6	2219	6	AR168835	AR168835 Sequence	195	343.8	29.8	720	10	S77863	S77863 mu-opioid r
123	422.6	36.6	2219	10	MUSDELTO	L06322 Mus musculus	196	338.8	29.4	24224	2	AC105888	AC105888 Rattus no
124	422.6	36.6	2272	6	AR105150	AR105150 Sequence	197	337.4	29.2	1144	10	AF126469	AF126469 Mus muscu
125	422.6	36.6	2272	6	AR178400	AR178400 Sequence	198	336.2	29.1	1223	6	AR404122	AR404122 Sequence
126	422.6	36.6	2272	10	MUSDELOPRE	L11064 Mouse delta	199	336.2	29.1	1283	6	AR404123	AR404123 Sequence
127	414	35.9	64745	2	AC136361	AC136361 Homo sapi	200	336.2	29.1	1283	10	AF115267	AF115267 Rattus no
128	411.8	35.7	1773	9	HSU07882	U07882 Human delta	201	334.6	29.0	686	4	SSU71149	U71149 Sus scrofa
129	411	35.6	1346	6	AR269395	AR269395 Sequence	202	327.4	28.4	2634	6	AR404119	AR404119 Sequence
130	410.2	35.5	1136	9	HSU10504	U10504 Human delta	203	327.4	28.4	2634	10	AF043276	AF043276 Mus muscu
131	409.6	35.5	1141	5	AY434690	AY434690 Rana pipi	204	327	28.3	1256	6	AF043277	AF043277 Mus muscu
132	408.6	35.4	1773	6	AR270842	AR270842 Sequence	205	327	28.3	1257	10	AF043277	AF043277 Mus muscu
133	408.6	35.4	1773	6	AX548822	AX548822 Sequence	206	327	28.3	2578	10	AF043278	AF043278 Mus muscu
134	407	35.3	1119	6	AX280915	AX280915 Sequence	207	319.6	27.7	830	6	AX746234	AX746234 Sequence
135	403.8	35.0	2587	5	AY148348	AY148348 Danio rer	208	304.6	26.4	488	10	D3166382	D31664 Mus musculus
136	399	34.6	998	6	A38530	A38530 Sequence 3	209	304.6	26.4	658	10	RNKOR2	U17994 Rattus norv
137	399	34.6	998	6	AR316836	AR316836 Sequence	210	304.6	26.4	1109	10	S778682	S77869 kappa opioi
138	396	34.3	1458	5	DAU1596	DAU1596 Danio rer	211	302.6	26.2	230734	2	AC133705	AC133705 Rattus no

212	298.8	25.9	432	10	MMUSRI2A	U16998 Mus musculus	285	214.8	18.6	1351	9	HUMSRI2A	M81830 Human somat
213	298.4	25.9	1241	10	AF075605	AF075605 Mus muscu	286	214.8	18.6	1510	6	AX646485	AX646485 Sequence
214	298.4	25.9	1244	10	AF062381	AF062381 Mus muscu	287	214.8	18.6	1510	9	AB065911	AB065911 Homo sapi
215	274.8	23.8	351	11	BV094394	BV094394 RPAWSEQO	288	214.8	18.6	1769	9	BC019610	BC019610 Homo sapi
216	274.4	23.8	345	11	BV094393	BV094393 RPAWSEQO	289	214.8	18.6	2570	9	EC009522	EC009522 Homo sapi
217	274	23.7	341	11	BV094399	BV094399 RPAWSEQO	290	214.8	18.6	3437	9	AF184174	AF184174 Homo sapi
218	268.8	23.3	8372	10	AF216218	AF216218 Rattus no	291	214.8	18.6	164766	2	AC018350	AC018350 Homo sapi
219	268.8	23.5	106777	2	AC136241	AC136241 Rattus no	292	214.8	18.6	167127	9	AC097641	AC097641 Homo sapi
220	259.4	22.5	194770	10	AL845173	AL845173 Mouse DNA	293	214	18.5	1845	5	AF139597	AF139597 Carassius
221	258.6	22.4	1083	10	D31666S2	D31667 Mus musculus	294	213.8	18.5	140008	10	AL935149	AL935149 Mouse DNA
222	257.4	22.3	1843	6	AX647137	AX647137 Sequence	295	213.6	18.5	215863	2	AC136812	AC136812 Rattus no
223	250.8	21.7	179888	9	HS1022E24	AL121581 Human DNA	296	213.6	18.5	252700	2	AC136575	AC136575 Rattus no
224	249.2	21.6	194498	5	AF329945	AF329945 Taxifugu	297	212.6	18.4	1461	10	RATSR	M97656 Rattus norv
225	243	21.1	1399	9	HUMSSTR42	U07061 Human somat	298	211.6	18.3	1110	6	AX280947	AX280947 Sequence
226	243	21.1	2447	6	AX746233	AX746233 Sequence	299	211.6	18.3	222981	10	ECAS19535	AF1669981 Mouse DNA
227	243	21.1	97912	9	HS3753D10	AL049651 Human DNA	300	211.2	18.3	441	4	ECAS19535	AJ519535 Equus cab
228	243	21.1	153187	2	AC011151	AC011151 Homo sapi	301	210.4	18.2	999	6	BD102712	BD102712 Ligand fo
229	242.6	21.0	1317	9	AR270883	AR270883 Sequence	302	210.4	18.2	999	6	BD182462	BD182462 Screening
230	242.6	21.0	1317	9	HUMSSTR4	D16826 Homo sapien	303	210.4	18.2	1002	6	AR308566	AR308566 Sequence
231	242.6	21.0	1427	6	AX335932	AX335932 Sequence	304	210.4	18.2	1002	6	AX548993	AX548993 Sequence
232	242.6	21.0	1427	9	HUMSONAT	L14856 Human somat	305	210.4	18.2	1002	6	AX923099	AX923099 Sequence
233	241	20.9	1167	6	AX549032	AX549032 Sequence	306	210.4	18.2	1518	6	I33192	I33192 Sequence 3
234	241	20.9	1340	9	HUMSONATA	L07833 Homo sapien	307	210.4	18.2	1518	6	AR270917	AR270917 Sequence
235	239.4	20.7	1167	6	AX280951	AX280951 Sequence	308	210.4	18.2	1518	6	HSU22492	U22492 Human G pro
236	234.6	20.3	192592	5	AL928096	AL928096 Zebrafish	309	208.2	18.0	946	4	AF148990	AF148990 Sus scrof
237	232.4	20.1	1107	4	BOVSOMREC	L06613 Bos taurus	310	208	18.0	1898	10	MMU26176	U26176 Mus musculu
238	230.2	19.9	1400	4	OAR314853	AJ314853 Ovis arie	311	207.2	18.0	1002	6	AR308688	AR308688 Sequence
239	229.6	19.9	1176	6	AX549026	AX549026 Sequence	312	205.6	17.8	1587	5	AF097727	AF097727 Carassius
240	229.6	19.9	1176	9	AX322536	AX322536 Homo sapi	313	205.4	17.8	1598	9	HSOPRMI2	AF024516 Homo sapi
241	229.6	19.9	1205	6	I98864	I98864 Sequence 13	314	205.4	17.8	96310	9	AL136444	AL136444 Human DNA
242	229.6	19.9	1634	6	I13402	I13402 Sequence 1	315	204.8	17.7	240	4	AY130756	AY130756 Sus scrof
243	229.6	19.9	1634	6	I98858	I98858 Sequence 1	316	203.6	17.6	371	10	MMOR2	U10559 Mus musculu
244	229.6	19.9	1634	6	AR270739	AR270739 Sequence	317	203.6	17.6	12467	10	MMU308511	AJ308511 Mus muscu
245	229.6	19.9	1634	9	HUMSRI1A	M81829 Human somat	318	203.6	17.6	12784	10	AF347691	AF347691 Mus muscu
246	229.6	19.9	4000	9	BC035618	BC035618 Homo sapi	319	203.6	17.6	177639	2	AC101942	AC101942 Mus muscu
247	229.6	19.9	171997	9	CNS07BEV	AL450109 Human chr	320	203.6	17.6	178454	2	AC055776	AC055776 Mus muscu
248	228.6	19.8	3615	10	RNGPCRNA	G62314 R.norvegicu	321	203.6	17.6	182048	2	AC027439	AC027439 Homo sapi
249	228.6	19.8	236764	2	AC119319	AC119319 Rattus no	322	200.8	17.4	539	4	MMOR3	U10560 Mus musculu
250	228.6	19.8	256401	2	AC098459	AC098459 Rattus no	323	200.5	17.4	750	4	AY305400	AY305400 Canis fam
251	226.6	19.6	1265	6	I13403	I13403 Sequence 3	324	199.2	17.3	1452	5	AF097726	AF097726 Carassius
252	226.6	19.6	1265	6	I98859	I98859 Sequence 3	325	199.2	17.3	148540	9	HS212P9	AL009181 Human DNA
253	226.6	19.6	1265	10	MUSSRI1A	M81831 Mus muscu	326	199.2	17.3	167335	2	AC023527	AC023527 Homo sapi
254	226.6	19.6	163312	10	AC123932	AC123932 Mus muscu	327	196	17.0	417	5	AF285174	AF285174 Danio rer
255	226.4	19.6	1176	6	AX280945	AX280945 Sequence	328	194.6	16.9	355	4	AY116499	AY116499 Sus scrof
256	224.4	19.4	1493	10	MWSSSTR2G	X56655 M.musculus	329	190.2	16.5	1757	10	RNKOR1	U17993 Rattus norv
257	224	19.4	1286	4	PGSSR	D21338 P.g DNA for	330	189.4	16.4	555	10	MMKOR3S08	U32932 Mus musculu
258	222.8	19.3	4730	10	AF008914	AF008914 Mus muscu	331	186.4	16.2	1008	6	BD187235	BD187235 Novel lig
259	222.8	19.3	142178	10	AL603705	AL603705 Mouse DNA	332	186.4	16.2	1011	4	AB085947	AB085947 Bos tauru
260	221.8	19.2	1904	6	AX305329	AX305329 Sequence	333	184	15.9	1560	10	RATSTR	M95544 Rattus norv
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262	221.2	19.2	1244	6	I13405	I13405 Sequence 7	335	184	15.9	254708	2	AC111761	AC111761 Rattus no
263	221.2	19.2	1244	6	I98861	I98861 Sequence 7	336	182.8	15.8	362	11	BV094388	BV094388 RPAWSEQO
264	221.2	19.2	1244	10	MUSSRI2A	M81832 Mus musculu	337	182.8	15.8	364	11	BV094392	BV094392 RPAWSEQO
265	220.8	19.1	2092	10	RATSONRA	M93273 Rat somatos	338	182.2	15.8	423	10	D31663S1	D31663 Mus musculu
266	220.8	19.1	2116	10	RATSONRRC	M96817 Rat somatos	339	182.2	15.8	2074	10	S77868	S77868 kappa opioi
267	220.8	19.1	245218	2	AC096468	AC096468 Rattus no	340	181.4	15.7	760	4	AY156053	AY156053 Sus scrof
268	220.6	19.1	1699	10	RATSON	L02915 Rattus norv	341	178.8	15.5	1000	6	BD169687	BD169687 Novel G p
269	219.4	19.0	2518	6	AR404121	AR404121 Sequence	342	178.8	15.5	1000	6	BD179429	BD179429 Screening
270	219	19.0	1229	9	HSU16860	U16860 Human kappa	343	178.8	15.5	1000	6	BD182529	BD182529 Screening
271	219	19.0	234999	2	AC117147	AC117147 Rattus no	344	178.8	15.5	1000	6	BD187208	BD187208 Novel lig
272	215.2	18.6	1023	6	BD102694	BD102694 Ligand fo	345	178.8	15.5	167249	9	AC009800	AC009800 Homo sapi
273	215.2	18.6	1023	6	BD169577	BD169577 Novel G p	346	178.8	15.5	173380	9	AC087348	AC087348 Homo sapi
274	215.2	18.6	1023	6	BD182444	BD182444 Screening	347	177	15.3	987	6	BD169569	BD169569 Novel G p
275	215.2	18.6	1023	6	BD187233	BD187233 Novel lig	348	177	15.3	987	6	BD187217	BD187217 Novel lig
276	215.2	18.6	179888	9	HS1023E24	AL121581 Human DNA	349	177	15.3	987	2	AC128209	AC128209 Rattus no
277	214.8	18.6	1107	6	E11322	E11322 Human cDNA	350	177	15.3	311157	2	AC131359	AC131359 Rattus no
278	214.8	18.6	1110	6	AX549028	AX549028 Sequence	351	176.8	15.3	993	6	BD187234	BD187234 Novel lig
279	214.8	18.6	1110	9	AX236542	AX236542 Homo sapi	352	176.8	15.3	996	4	AB085946	AB085946 Bos tauru
280	214.8	18.6	1147	6	I98865	I98865 Sequence 15	353	176.6	15.3	903	4	AY156052	AY156052 Sus scrof
281	214.8	18.6	1351	6	I13404	I13404 Sequence 5	354	175.6	15.3	987	6	AR308563	AR308563 Sequence
282	214.8	18.6	1351	6	I98860	I98860 Sequence 5	355	175.6	15.2	987	6	AX548991	AX548991 Sequence
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358	175.6	15.2	1596	6	AR270916	Sequence	431	132.2	11.5	2004	3	LS27270459	AR270459 Lymnaea s
359	175.6	15.2	1596	9	HSU22491	Human G pro	432	131.2	11.4	672	6	E13006	E13006 cDNA encodi
C 360	175.4	15.2	169376	2	AX537357	Danio rer	C 433	130.4	11.3	349	11	BV094396	BV094396 RPAMSEQO
361	175.4	15.2	221012	5	BL4845357	Zebrafish	434	130.4	11.3	1332	6	AX254588	AX254588 Sequence
362	174.8	15.1	177021	2	BX324198	Danio rer	435	130.4	11.3	3332	6	AX254587	AX254587 Sequence
363	173.6	15.0	1837	5	AF272949	Carassius	436	130.4	11.3	34132	2	AC019488	AC019488 Drosophil
364	173.2	15.0	178853	2	BX323024	Danio rer	C 437	130.4	11.3	10461	2	AC010558	AC010558 Drosophil
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C 367	172.2	14.9	346	11	BV095691	RPAMSEQO	C 440	129.6	11.2	687	6	BD102695	BD102695 Lizard fo
368	172.2	14.9	354	10	CPU57928	Novel G p	C 441	129.6	11.2	687	6	BD169578	BD169578 Novel G p
369	170.2	14.7	987	6	BD169665	Novel G p	C 442	129.6	11.2	687	6	BD182445	BD182445 Screening
370	170.2	14.7	1083	6	BD169664	Novel G p	C 443	126.8	11.0	426	11	G67505	G67505 SSTR X5.1 H
371	170.2	14.7	219812	10	AC118196	Novel G p	444	126	10.9	1160	10	S37484	S37484 angiotensin
372	169.4	14.7	10494	9	AY081193	Homo sapi	445	126	10.9	2198	10	BC036175	BC036175 Mus muscu
373	169.4	14.7	33002	9	HS349511	Human DNA	446	126	10.9	178871	10	AL607131	AL607131 Mouse DNA
374	169.4	14.7	162342	9	AC009041	Homo sapi	447	125.8	10.9	555	11	G67497	G67497 SSTR X1.2 H
375	169.4	14.7	265786	9	AE006466	Homo sapi	448	125.4	10.9	343	11	BV094400	BV094400 RPAMSEQO
C 376	169.4	14.7	298166	2	AC087563	Homo sapi	449	125	10.8	473	11	G67508	G67508 SSTR X5.1 H
377	169	14.6	1095	6	AX549034	Sequence	450	124.4	10.8	3219	6	AX827860	AX827860 Sequence
378	169	14.6	1245	9	HMSSTR5	Homo sapien	451	124.4	10.8	3219	10	RATVIA1R	RATVIA1R
379	167.4	14.5	1095	6	AX280953	Sequence	452	124.4	10.8	3295	10	RATAT1B	RATAT1B
380	167.4	14.5	1285	6	AR270803	Sequence	C 453	124.4	10.8	155176	2	AC142023	AC142023 Rattus no
381	167.4	14.5	1285	9	HMSSTR28A	Sequence	C 454	124.4	10.8	181773	2	AC136125	AC136125 Rattus no
C 382	166.4	14.4	245471	2	AC098959	Sequence	455	124.2	10.7	636	10	S71756	S71756 somatostat
C 383	166.4	14.4	265670	2	AC121696	Rattus no	456	123.4	10.7	1211	9	AF080586	AF080586 Homo sapi
384	165.6	14.2	195675	2	AC121145	Carassius	457	123.4	10.7	1219	6	AR317275	AR317275 Sequence
C 385	164.2	14.2	244626	2	AC131323	Mus muscu	458	123.4	10.7	1309	6	AX549080	AX549080 Sequence
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C 387	163.8	14.2	181202	2	AC008048	Homo sapi	460	123.4	10.7	1365	6	AF0439801	AF0439801 Sequence
388	162.2	14.1	1257	6	AX549030	Sequence	461	123	10.7	606	9	AF042362	AF042362 Cercopith
389	162.2	14.1	1257	9	AY322541	Homo sapi	462	122.4	10.6	1164	6	AR168469	AR168469 Sequence
390	162.2	14.1	1296	6	I13406	Sequence 9	463	122.4	10.6	1164	6	AR182286	AR182286 Sequence
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392	162.2	14.1	1297	6	HMSSTR3Y	Human somat	465	122.4	10.6	1164	6	BD056683	BD056683 Galanin r
393	162.2	14.1	1413	6	AR270758	Sequence	466	122.4	10.6	1164	6	BD064654	BD064654 Human gal
394	162.2	14.1	1413	9	HMSSTR3X	Human somat	467	122.4	10.6	1164	6	BD064656	BD064656 Mouse gal
395	162.2	14.1	1682	9	BC042068	Homo sapi	468	122	10.6	1068	9	AF127528	AF127528 Callithri
396	162.2	14.1	9214	9	AY277678	Homo sapi	469	122	10.6	1646	3	AF336364	AF336364 Periplane
C 397	162.2	14.1	128942	2	HS151814	Human DNA s	470	121.2	10.5	1080	6	AR096460	AR096460 Sequence
398	162.2	14.1	176233	2	AC146470	Pan trogl	471	121	10.5	1101	5	AAJ5132	AAJ5132 Anguilla
399	161.4	14.0	2154	10	AF035777	Mus muscu	472	120.8	10.5	1164	6	AX280881	AX280881 Sequence
400	161.4	14.0	2905	10	AF030441	Mus muscu	473	120.6	10.5	1068	9	AF017282	AF017282 Macaca mu
401	160.6	13.9	1257	6	AX280949	Sequence	474	120.6	10.5	1116	6	AX720821	AX720821 Sequence
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403	158.2	13.7	1285	4	AY156054	Sus scrof	476	120.6	10.5	2415	9	HSU79526	HSU79526 Human orpha
404	157.4	13.6	356	10	S81965	Mus sp. del	477	119.6	10.4	1450	10	RATANGAREC	RATANGAREC
405	156.2	13.5	1796	6	I13407	Sequence 11	478	119	10.3	1495	6	AR270627	AR270627 Rat angiot
406	156.2	13.5	1796	6	I13407	Sequence 11	479	119	10.3	1495	6	AR380476	AR380476 Sequence
407	156.2	13.5	1797	10	MUSSTR3A	Mouse somat	480	119	10.3	1495	9	HUMCCCKRIA	HUMCCCKRIA
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409	155.6	13.5	356	10	MMKOR3506	U32930 Mus muscu	482	119	10.3	1516	6	AB065871	AB065871 Homo sapi
410	153.4	13.3	1384	10	RAT50MATO	L04535 Rattus norv	483	119	10.3	1609	6	E13385	E13385 cDNA encodi
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C 412	152	13.2	196853	2	AC023126	Homo sapi	485	119	10.3	1900	6	HSU79527	HSU79527 Human orpha
413	151.8	13.2	1525	10	AF004740	Mus muscu	486	119	10.3	2154	9	BC051306	BC051306 Homo sapi
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419	144.6	12.5	3985	10	RNGROR	X63574 R.norvegicu	492	119	10.3	2214	9	HUMEM145	HUMEM145
420	144.4	12.5	304	10	AY028944	Mus muscu	C 493	119	10.3	71430	9	AC063957	AC063957 Homo sapi
421	141.8	12.3	1842	3	LST270462	Lymnaea s	C 494	119	10.3	177334	9	AC138069	AC138069 Homo sapi
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RESULT 1
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LOCUS         Human kappa opioid receptor (hKOR) mRNA, complete cds.
DEFINITION
ACCESSION    U17298
VERSION      U17298.1  GI:596069
KEYWORDS
SOURCE       Homo sapiens (human)
ORGANISM     Homo sapiens
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1154)
Simonin,F., Gaveriaux-Ruff,C., Befort,K., Matthes,H., Lannes,B.,
Michelotti,G., Mattei,M.G., Charron,G., Bloch,B. and Kieffer,B.,
kappa-Opioid receptor in humans: cDNA and genomic cloning,
chromosomal assignment, functional expression, pharmacology, and
expression pattern in the central nervous system
Proc. Natl. Acad. Sci. U.S.A. 92 (15), 7006-7010 (1995)
JOURNAL      95350200
MEDLINE      7624359
PUBMED
REFERENCE    2 (bases 1 to 1154)
AUTHORS      Mansson,E., Bare,L. and Yang,D.
TITLE        Isolation of a human kappa opioid receptor cDNA from placenta
JOURNAL      Biochem. Biophys. Res. Commun. 202 (3), 1431-1437 (1994)
MEDLINE      94338360
PUBMED
REFERENCE    3 (bases 1 to 1154)
AUTHORS      Kieffer,B.
TITLE        Direct Submission
JOURNAL      Submitted (18-NOV-1994) Brigitte Kieffer, Ecole Supérieure De
Biotechnologie De Strasbourg, Boulevard Sebastien Brandt, 11kirch,
67400, France
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                CHPVKALDFRPLKAKINI CTWLLSSVGI SAIVLGTKVREDVDVIECSLPDPDD
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ORIGIN
Query Match      100.0%; Score 1154; DB 9; Length 1154;
Best Local Similarity 100.0%; Pred. No. 2e-202;
Matches 1154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 1 ATGGACTCCCGGATCCAGATCTTCGGGGGAGCGGGGCCCTTACCTGGCCCGCCGAGCGCC 60
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DB 61 TCCCTGCCCCCAACAGCAGCGCCCTGGTTTCCCGGCTGGCGGAGCGCCGACGACGAGCGGC 120
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RESULT 2

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DB 661 TGGTGGGACCTCTTCATGAGATCTCGCTTCTCATCTTTGCTCTCGTGATCCCTGCTCCTC 720
QY 721 ATCATCATCTGCTCTACACCCCTGATGATCTCGTCTCAAGAGCGTCCGGCTCCCTTTCT 780
DB 721 ATCATCATCTGCTCTACACCCCTGATGATCTCGTCTCAAGAGCGTCCGGCTCCCTTTCT 780
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HUMOPRK1B 1604 bp mRNA linear PRI 22-MAR-1995
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 complete cds.
 DEFINITION L37362
 ACCESSION L37362
 VERSION L37362.1 GI:722617
 KEYWORDS OPRK1 gene; kappa opioid receptor; opioid receptor.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 REFERENCE 1 (bases 1 to 1604)
 AUTHORS Zhu, J., Chen, C., Xue, J.-C., Kunapuli, S., Deriel, J. K. and
 Liu-Chen, L.-Y.
 TITLE Cloning of a human kappa opioid receptor from the brain
 JOURNAL Life Sci. 56, 201-207 (1995)
 COMMENT Original source text: Homo sapiens (clone d2-115) (tissue library:
 genomic in lambda dash and cDNA in lambda ZAPII) fetus brain cDNA
 to mRNA.

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 ACCESSION AR270854
 VERSION AR270854.1 GI:29702088
 KEYWORDS
 SOURCE
 ORGANISM
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 Unknown.
 1 (bases 1 to 1182)
 Au-Young, J. and Seilhamer, J. J.
 Composition for the detection of signaling pathway gene expression

JOURNAL Patent: US 6500938-A 1417 31-DEC-2002;
FEATURES Location/Qualifiers
source 1..1182
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ORIGIN

Query Match 99.3%; Score 1146; DB 6; Length 1182;
Best Local Similarity 99.6%; Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Db Qy 1 ATGGACTCCCGATCCAGATCTTCGCGGGAGCGCGCCCTACCTGCGCCCGAGCGCC 60
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ACCESSION AX548862
VERSION AX548862.1 GI:25813740
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
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Burmer, G.C., Roush, G.L. and Brown, J.P.
Antigenic peptides, such as for G protein-coupled receptors
(GPCRs), antibodies thereto, and systems for identifying such
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Patent: WO 02061087-A 147 08-AUG-2002;
Lifespan Biosciences, Inc. (US)
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Best Local Similarity 99.6%; Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Db Qy 1 ATGGACTCCCGATCCAGATCTTCGCGGGAGCGCGCCCTACCTGCGCCCGAGCGCC 60
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DEFINITION	Sequence 80 from Patent WO03038129.					
ACCESSION	AX774764					
VERSION	AX774764.1	GI:32486280				
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SOURCE	Homo sapiens (human)					
ORGANISM	Homo sapiens					
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
AUTHORS	Mammalia; Euthera; Primates; Catarrhini; Homidae; Homo.					
TITLE	Raponi, M.					
JOURNAL	Methods for assessing and treating leukemia					
FEATURES	Patent: WO 03038129-A 80 08-MAY-2003;					
	Ortho-Clinical Diagnostics, Inc. (US)					
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Best Local Similarity 99.6%; Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 ATGAGCTCCCGGATCCAGATCTTCGCGGGAGCGCGGCCCTACCTGCGCCCGAGCGGC 60
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*

RESULT 6
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 DEFINITION Human kappa opioid receptor (hKOR) mRNA, complete cds.
 ACCESSION U11053
 VERSION U11053.1 GI:532059
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 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 1 (bases 1 to 1182)
 TITLE Isolation of a human kappa opioid receptor cDNA from placenta
 JOURNAL Biochem. Biophys. Res. Commun. 202 (3), 1431-1437 (1994)
 MEDLINE 94338360
 PUBMED 8060324
 REFERENCE 2 (bases 1 to 1182)
 AUTHORS Mansson, E.
 DIRECT SUBMISSION
 TITLE Submitted (20-JUN-1994) Erik Mansson, Molecular Biology, Ohmeda,
 JOURNAL PPD, 100 Mountain Avenue, Murray Hill, NJ 07974, USA
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FEATURES

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 Best Local Similarity 99.6%; Pred. No. 6e-201;
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RESULT 11
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LOCUS AR281680 1284 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 3 from patent US 6518480.
ACCESSION AR281680
VERSION AR281680.1 GI:29717435
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 1284)
UnClassified.
AUTHORS Conklin,B.R.
TITLE Selective targeted cell activation by expression of a G
protein-coupled receptor activated superiorly by synthetic ligand
JOURNAL Patent: US 6518480-A 3 11-FEB-2003;
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DEFINITION Sequence 542 from Patent WO0177172.
ACCESSION AX280919
VERSION AX280919.1 GI:16608215
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
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Lehmann-Bruinsma,K., Liaw,C.W. and Lin,I.L.
AUTHORS Non-endogenous, constitutively activated known g protein-coupled
TITLE receptors
JOURNAL Patent: WO 0177172-A 542 18-OCT-2001;
Arena Pharmaceuticals, Inc. (US)
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LOCUS
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ACCESSION AY168006
VERSION AY168006.1 GI:27373027
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1396)
AUTHORS Lu, L. D. and Mansson, B.
DIRECT SUBMISSION
SUBMITTED (23-OCT-2002) Molecular Biology, Adolor Corporation, 371
Phoenixville Pike, Malvern, PA 19355, USA
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ORIGIN

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RESULT 14
AR281681
LOCUS AR281681.1 1275 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 5 from patent US 6518480.
ACCESSION AR281681
VERSION AR281681.1 GI:29717436

KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 1275)
AUTHORS Conklin,B.R.
TITLE Selective target cell activation by expression of a G
protein-coupled receptor activated superiorly by synthetic ligand
JOURNAL Patent: US 6518480-A 5 11-FEB-2003;
FEATURES Location/Qualifiers
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Best Local Similarity 93.1%; Pred. No. 3e-174;
Matches 1062; Conservative 0; Mismatches 70; Indels 9; Gaps 1;

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for Advanced Studies; c/o Shimadzu Corporation N-80, 1
Nishinokyo-Kuwarehara-cho, Kyoto 604, Japan (Tel: 81-75-823-1208,
Fax: 81-75-811-8186)

FEATURES
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ORIGIN

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Gaps 0;				

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181	ATCATCAGCGGGTCTACTCCGTAGTGTCTGTGGCTTGGTGGGCAATCTCCTCGTCT	240
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RESULT 20
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 VERSION
 S81111.1 GI:1478285
 KEYWORDS
 SOURCE
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 ORGANISM
 Mus sp.
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 REFERENCE
 1 (bases 1 to 1288)
 Belkowski, S.M., Zhu, J., Liu-Chen, L.Y., Eisenstein, T.K., Adler, M.W.
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 TITLE
 Sequence of kappa-opioid receptor cDNA in the R1.1 thymoma cell
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 REMARK
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ORIGIN

Query Match 78.9%; Score 910.8; DB 10; Length 1288;
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RESULT 21
A68828
LOCUS

DEFINITION Sequence 5 from Patent WO9802534.
ACCESSION A68828
VERSION A68828.1 GI:4759756
KEYWORDS
SOURCE unidentifed
ORGANISM unidentifed
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REFERENCE 1. (bases 1 to 1408)
AUTHORS Kieffer,B.L., Matches,H.W., Simonin,F.H., Dierich,A. and Lemeur,M.
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COMMENT CENTRE NAT RECH SCIENT (FR)
FEATURES Other publication FR 2750825 19980116.
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ORIGIN

Query Match 78.9%; Score 910.8; DB 6; Length 1408;
Best Local Similarity 86.8%; Pred. No. 1..2e-157;
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DEFINITION Sequence 1 from patent US 6096513.
ACCESSION AR105149
VERSION AR105149.1 GI:12818746
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
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    Best Local Similarity 86.8%; Pred. No. 1.2e-157;
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  QY 1 ATGGACTCCCGATCAGATCTTCGCGGGAGCCGGCCCTACCTGCGCCCGAGCGCC 60
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ORGANISM Unknown.
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    Best Local Similarity 86.8%; Pred. No. 1.2e-157;
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QY	1021	TTCGGGACTTCTGCTTTTCCACTGAAGATGAGGATGGAGCGGACAGACACTAGCACAGTC	1080
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ROD 13-DEC-1993

DEFINITION	Mouse kappa opioid receptor mRNA, complete cds.			
ACCESSION	L11065			
VERSION	L11065.1 GI:348248			
KEYWORDS	kappa opioid receptor.			
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ORGANISM	Mus musculus			
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (Bases 1 to 1410)			
AUTHORS	Yasuda,K., Raynor,K., Kong,H., Breder,C.D., Takeda,J., Reisine,T. and Bell,G.I.			
TITLE	Cloning and functional comparison of kappa and delta opioid receptors from mouse brain			
JOURNAL	Proc. Natl. Acad. Sci. U.S.A. 90 (14), 6736-6740 (1993)			
MEDLINE	93342064			
PUBMED	8393575			
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RESULT 28
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LOCUS Rattus norvegicus mRNA for kappa opioid receptor, complete cds.
DEFINITION Rattus norvegicus mRNA for kappa opioid receptor, complete cds.
ACCESSION D18929.1
VERSION 1
KEYWORDS kappa opioid receptor.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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REFERENCE 1 (bases 1 to 2481)
            Minami,M., Toya,T., Katao,Y., Maekawa,K., Nakamura,S., Onogi,T.,
            Kaneko,S. and Satoh,M.
            Cloning and expression of a cDNA for the rat kappa-opioid receptor
            PNAS Lett. 329 (3), 291-295 (1993)
            93374033
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REFERENCE 2 (bases 1 to 2481)
            Minami,M.
            Direct Submission
            Submitted (21-JUL-1993) Masabumi Minami, Faculty of pharmaceutical
            Sciences, Kyoto University, Department of Pharmacology; Kyoto,
            Kyoto 606-01, Japan (E-mail: f51250@sakura.kudpc.kyoto-u.ac.jp,
            Tel:075-753-4546, Fax:075-753-4586)
            Submitted (21-JUL-1993) to DDBJ by:
            Masabumi Minami
            Department of Pharmacology
            Faculty of pharmaceutical Sciences
            Kyoto University
            Kyoto, Kyoto 606-01
            Japan
            Phone: 075-753-4546
            Fax: 075-753-4586.
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Best Local Similarity 86.8%; Pred. No. 1.2e-157;
Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
 Pampusch, M.S., Zilliox, M., Osinski, M.A., Brown, D.R. and
 Murtaugh, M.P.
 Distribution of delta and kappa opioid receptor mRNA in porcine
 immune tissues
 Unpublished
 2 (bases 1 to 715)
 Pampusch, M.S.
 Direct Submission
 Submitted (01-JUL-1997) Veterinary Pathobiology, University of
 Minnesota, 1971 Commonwealth Ave, 205 Veterinary Science, St. Paul,
 MN 55108, USA
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 1 (bases 1 to 179356)
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 2 (bases 1 to 179356)
 Birren, B., Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N.,
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 Zimmer, A. and Zody, M.
 Direct Submission
 TITLE
 JOURNAL
 COMMENT
 Submitted (03-OCT-2000) Whitehead Institute/MIT Center for Genome
 Research, 320 Charles Street, Cambridge, MA 02141, USA
 On Jan 15, 2001 this sequence version replaced gi:10518402.
 All repeats were identified using RepeatMasker.
 Smit, A.F.A. & Green, P. (1996-1997)
 http://ftp.genome.washington.edu/RM/RepeatMasker.html
 ----- Genome Center
 Center: Whitehead Institute/ MIT Center for Genome Research
 Center code: WIBR
 Web site: http://www-seq.wi.mit.edu
 Contact: sequence_submissions@genome.wi.mit.edu
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 Consensus quality: 179111 bases at least Q20
 Insert size: 182000; agarose-fp
 Insert size: 179156; sum-of-contigs

Quality coverage: 9.3 in Q20 bases; agarose-fp
 Quality coverage: 9.4 in Q20 bases; sum-of-contigs

 * NOTE: This is a 'working draft' sequence. It currently
 * consists of 3 contigs. The true order of the pieces
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 * arbitrary. Gaps between the contigs are represented as
 * runs of N, but the exact sizes of the gaps are unknown.
 * This record will be updated with the finished sequence
 * as soon as it is available and the accession number will
 * be preserved.

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RESULT 34

AC009646/c

LOCUS

DEFINITION

AC009646

AC009646.12

VERSION

HTG.

SOURCE

Homo sapiens (human)

Homo sapiens

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 183519)

Birren,B., Nusbaum,C. and Lander,E.

Homo sapiens chromosome 8, clone RP11-162D9

Unpublished

2 (bases 1 to 183519)

Birren,B., Linton,L., Nusbaum,C., Lander,E., Allen,N., Anderson,M.,

Baker,J., Baldwin,J., Barna,N., Beckerly,R., Benn,J., Brown,A.,

Castle,A., Cerny,J., Colangelo,M., Collins,S., Collymore,A.,

Cooke,P., Dearellano,K., Depayre,E., Devon,K., Dewar,K.,

Donegan,L., Doyle,M., Ferreira,P., FitzHugh,W., Forrest,C.,

Funker,R., Gage,D., Galagan,J., Gardyna,S., Gilbert,D., Grant,G.,

Hagos,B., Heaford,A., Horton,L., Howland,J.C., Jones,C., Kann,L.,

Karatas,A., Lehoczy,J., Liu,C., Locke,K., Macdonald,P.,

Marquis,N., McEwan,P., McGurk,A., McKernan,K., McLaughlin,J.,

Meldrim,J., Molla,M., Morris,W., Morrow,J., Mychaleckyj,J.,

Naylor,J., Niloff,M., O'Connor,T., O'Donnell,P., Pavlin,B.,

Peterson,K., Pollara,V., Riley,R., Roberts,D., Roy,A., Severy,P.,

Stange-Thomann,N., Stojanovic,N., Stone,C., Subramanian,A.,

Tesfaye,S., Torrella-Miller,I., Vassiliev,H., Vo,A., Wagner,A.,

Wheeler,J., Wu,X., Wyman,D., Ye,W.J. and Zody,M.

Direct Submission

Submitted (28-AUG-1999) Whitehead Institute/MIT Center for Genome

Research, 320 Charles Street, Cambridge, MA 02141, USA

3 (bases 1 to 183519)

Birren,B., Linton,L., Nusbaum,C., Lander,E., Ali,A., Allen,N.,

Anderson,S., Barna,N., Bastien,V., Bloom,T., Boguslavsky,L.,

Boukhgalter,B., Brown,A., Camarata,J., Campolano,A., Chang,J.,

Chazaro,B., Choepel,Y., Colangelo,M., Collins,S., Collymore,A.,

Cook,A., Cooke,P., Dearellano,K., Dewar,K., Diaz,J.S., Dodge,S.,

Faro,S., Ferreira,P., FitzGerald,M., FitzHugh,W., Gage,D.,

Galagan,J., Gardyna,S., Ginde,S., Gord,S., Goyette,M., Graham,L.,

Grand-Pierre,N., Hagos,B., Horton,L., Hulme,W., Illiev,I.,

Johnson,R., Jones,C., Kamat,A., Karatas,A., Kellis,C., LaRocque,K.,

Lamazares,R., Landers,T., Lehoczy,J., Levine,R., Lindblad-Toh,K.,

Liu,G., MacLean,C., Macdonald,P., Major,J., Marquis,N.,

Matthews,C., McCarthy,M., McEwan,P., McKernan,K., Meldrim,J.,

Meneus,C., Mihova,T., Mlenga,V., Murphy,T., Naylor,J., Nguyen,C.,

O'Neil,R., Norbu,C., Norman,C.H., O'Connor,I., O'Donnell,P.,

O'Neil,D., Oliver,J., Peterson,K., Phukhang,P., Pierre,N.,

Pollara,V., Raymond,C., Retta,R., Rieback,M., Riley,R., Rise,C.,

Rogov,P., Roman,J., Rosetti,M., Roy,A., Santos,R., Schauer,S.,

Schuback,R., Seaman,S., Severy,P., Spencer,B., Stange-Thomann,N.,

Stojanovic,N., Strauss,N., Subramanian,A., Talamas,J., Tesfaye,S.,

Theodore,J., Topham,K., Travers,M., Travis,N., Trigilio,J., Ye,W.J.,

Vassiliev,H., Viel,R., Vo,A., Wilson,B., Wu,X., Wyman,D., Zody,M.

Young,G., Zainoun,J., Zembek,L., Zimmer,A. and Zody,M.

Direct Submission

Submitted (17-JUN-2002) Whitehead Institute/MIT Center for Genome

Research, 320 Charles Street, Cambridge, MA 02141, USA

4 (bases 1 to 183519)

Birren,B., Nusbaum,C., Lander,E., Ali,A., Allen,N., Anderson,S.,

Barna,N., Bastien,V., Bloom,T., Boguslavsky,L., Boukhgalter,B.,

Camarata,J., Chang,J., Chazaro,B., Choepel,Y., Collymore,A.,

Cook, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S.,
 Faro, S., Ferreira, P., Fitzgerald, M., Gage, D., Galagan, J.,
 Gardyna, S., Gord, S., Graham, L., Grand-Pierre, N., Hagos, B.,
 Horton, L., Hulme, W., Iliev, T., Johnson, R., Jones, C., Kamat, A.,
 Karatas, A., Kells, C., Landers, T., Levine, R., Lindblad-Toh, K.,
 Liu, G., MacLean, C., Macdonald, P., Major, J., Matthews, C.,
 McCarthy, M., Meldrum, J., Meneus, L., Mihova, T., Mlenga, V.,
 Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., Norman, C.H.,
 O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K.,
 Phunkhang, P., Pierre, N., Raymond, C., Retta, R., Rise, C., Rogov, P.,
 Roman, J., Roy, A., Schauer, S., Schupbach, R., Seaman, S., Severy, P.,
 Smith, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Talamas, J.,
 Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassiliev, H.,
 Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, J.,
 Zembek, L., Zimmer, A. and Zody, M.
 Direct Submisson
 Submitted (30-JUL-2002) Whitehead Institute/MIT Center for Genome
 Research, 320 Charles Street, Cambridge, MA 02141, USA
 On Jul 30, 2002 this sequence version replaced GI:21431154.
 All repeats were identified using RepeatMasker:
 Smit, A.F.A. & Green, P. (1996-1997)
 http://ftp.genome.washington.edu/RM/RepeatMasker.html

----- Genome Center

Center: Whitehead Institute/ MIT Center for Genome Research

Center code: WIER

Web site: <http://www-seq.wi.mit.edu>

Contact: sequence_submissions@genome.wi.mit.edu

----- Project Information

Center project name: L2157

Center clone name: 162_D_9

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Location/Qualifiers

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Best Local Similarity 100.0%; Pred.No. 1,7e-90;

Matches 546; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 35
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LOCUS Rana pipiens kappa opioid-like receptor (RPKOR) mRNA, complete
DEFINITION
ACCESSION AF530573
VERSION AF530573.1 GI:33329184
KEYWORDS
SOURCE Rana pipiens (northern leopard frog)
ORGANISM
REFERENCE 1 (bases 1 to 1454)
AUTHORS Stevens, C.W. and Brasel, C.M.
TITLE Cloning and homology of three novel opioid-like receptors in an
amphibian
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1454)
AUTHORS Stevens, C.W. and Brasel, C.M.
TITLE Direct Submission
JOURNAL Submitted (18-JUL-2002) Pharmacology, OSU-CHS, 1111 W. 17th St.,
Tulsa, OK 74107, USA

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results in a frameshift in the potential coding region"

gene
ORIGIN
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RESULT 36
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DEFINITION      Danio rerio opioid receptor-like protein ZFOR3 mRNA, complete cds.
ACCESSION      AF285173
VERSION        AF285173.1  GI:12620176
KEYWORDS
SOURCE
ORGANISM
Danio rerio (zebrafish)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Danio.
REFERENCE
1 (bases 1 to 1477)
Rodriguez,R.E., Gonzalez-Sarmiento,R. and Alvar,F.
Cloning and characterization of ZFOR3, a new zebrafish opioid
receptor-like protein
Unpublished
2 (bases 1 to 1477)
Rodriguez,R.E., Gonzalez-Sarmiento,R. and Alvar,F.
Direct Submission
TITLE
Submitted (06-JUL-2000) Medicine, University of Salamanca, Avda.
del Campo Charro, Salamanca 37007, Spain
JOURNAL
Location/Qualifiers
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LOCUS      Danio rerio mu opioid receptor like OR2 (or2) mRNA, complete cds.
ACCESSION      AF132813
VERSION        AF132813.1  GI:12658907
KEYWORDS
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ORGANISM
Danio rerio (zebrafish)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Danio.
REFERENCE
1 (bases 1 to 1387)
Barralio,A., Gonzalez-Sarmiento,R., Alvar,F. and Rodriguez,R.E.
ZFOR2, a new opioid receptor-like gene from the teleost zebrafish
(Danio rerio)
Brain Res. Mol. Brain Res. 84 (1-2), 1-6 (2000)
JOURNAL
MEDLINE      20565716
PUBMED      11113526
REFERENCE
2 (bases 1 to 1387)
Rodriguez,R.E., Gonzalez-Sarmiento,R., Barralio,A. and Alvar,F.
Direct Submission
TITLE
Submitted (03-MAR-1999) Biochemistry and Molecular Biology,
University of Salamanca, Campus Unamuno, Salamanca 37007, Spain
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Qy	205	GTGTTGCTGCTGGGCTTGGTGGCAACTGCTGCTGATGTTCTGATGATCATCCGATACACA	264	
Db	231	GTGATGGGAATGGAGCTGGTGGGAACGTCCTCGTCAATGATGTTATTAAGATACACC	290	
Qy	265	AAGATGAAGACAGCAACCAATTTACATATTTAACTCGCTTTGGCAGATGCTTAGTT	324	
Db	291	AAATGAAAACTCGACCAACATCTACATCTTCAACCTGCTCTAGCAGATTCCTTGGCG	350	
Qy	325	ACTACACCAATGCCCTTTTCAGGTACGGTCTACTTGATGAATTCCTGGCCCTTTGGGGAT	384	
Db	351	ACAAGTACTCTACCTTTTCAGAGTGGAAATTAAGTGAAGGTCATGGCCCTTTTGGAGAC	410	
Qy	385	GTGCTGTGCAAGATAGTAAATTTCAATTGATTACTACAACATGTTTCAACGATCTTCCACC	444	
Db	411	GAGCTGTGCAAGATTGTGATGTCTATTGATTACTACAACATGTTTCAACGATCTTCTTACT	470	
Qy	445	TTGACCATGATGAGCTGGACCGCTACATTTGCCGTGGCCAGTGGCCCGGTAAGGCTTTGGAC	504	
Db	471	CTCACAAACCATGAGTGTGTACCGTTATCGCTGTTTGGCACCCGGTTAAGCCTTTGGAC	530	
Qy	505	TTCCGCACACCCCTTGAAGGCAAAAGATCATCAATATCTGTCATCTGGCTGCTGCTCATCT	564	
Db	531	TTCAGAACGCCCGAAATGCAAGATCGTCAACGTGTGTAACTTGGATCTTTTCATCTGCA	590	
Qy	565	GTTGGCATCTCTGCAATAGTCTTTGGAGGACCAAAAGTCAGGAGACGTCGATGCTATT	624	
Db	591	ATCGGCTCCCTGTCATGGTGCATGGCTCACCACATTTCTGATCTGCACTCGAATGGCATC	650	
Qy	625	GAGTGCTCTCTTGCAATTTCCCAAGTATGATGATCTCTCTGGTGGGACCTCTTTCATGAAGATC	684	
Db	651	ATTGACTGCATTTTGCTCTTTCCCATCCCGTCTGCTGTAACCTGGGAGAACCTCTGGAATC	710	
Qy	685	TGGTCTTTCATCTTTGGCTTCTGATACCTGTCCTCATTCATCATCTGTCGTACACCCGTG	744	
Db	711	TGGCTCTTTCATCTTTTGCTTTCATCATGCCCGTCTCATCATCCGCTCTGCTACGGCTGT	770	
Qy	745	ATGATCTGCTGCTCTCAAGAGCGTCCGGCTCTCTTTCTGGCTCCCGAGAGAAAGATCGCAAC	804	
Db	771	ATGATCTCTCGCTCTGAAGCGTTCGAAATGCTCTCTGGCTCAAGAGAGAGGACCGCAAC	830	
Qy	805	CTCGTTAGGATACCAAGACTGGTCTCGGTGGTGGTGGAGTCTTTCGTCTGCTGGAAT	864	
Db	831	CTCCGGGCGCATACCCGAAATGGTCTGCTGGTGGTGGCGGTTTTTCATCGTTTGTCTGACG	890	
Qy	865	CCCATTCACATATTCATCCCTGGTGGAGCTCTCGGGGAGACCTCCCAACAGCACAGCTGCT	924	
Db	891	CCCATTCACATCTTCGTATCATCAAAAGCTCTGGTGACCATTCCCAATCTCCTCTCGAG	950	
Qy	925	CTCTCCAGCTATTACTTCTGCATCGCCTTAGGCTATACCAACAGTAGCTGGAATCCCAT	984	
Db	951	ACCATCACCTGGCATTTCTGCATCGCCTCGGCTACCAACAGCTGCCTCAACCCGGTG	1010	
Qy	985	CTCTACGCCCTTCTTGATGAAAACTTCAAGCGGTGTTTCCGGGACTTCTGCTTTCCACTG	1044	
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Cy	1105	TACCTGAGGACA---TCGATGGGATCAATAACCAGTATGACTAGTCGTGGA	1154
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LOCUS	Sequence 1 from patent US 6225080.		
DEFINITION	Accession AR148257		
ACCESSION	AR148257.1 GI:15112347		
VERSION			
KEYWORDS	Unknown.		
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 2135)		
AUTHORS	Uhl,G.R., Eppler,C.Mark. and Wang,J.-B.		
TITLE	Mu-subtype Opioid receptor		
JOURNAL	Patent: US 6225080-A 1 01-MAY-2001;		
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ORIGIN			

Query Match	38.8%;	Score 448;	DB 6;	Length 2135;
Best Local Similarity	67.0%;	Pred. No. 1.9e-72;		
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QY	110	ACAGCAACGGCAGCGCGGCTCGGAGACGCGAGCTGGAGCCCGCGCAGCATCTCCCGG	169	
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Db	227	TCAGAGCATTACCATCATGCCCTCTACTCTATCTGTTGTGTAGTGGGCTCTTCGGAA	286	
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QY	290	ACATATTTAACTGGCTTTGGCAGATGCTTTAGTTACTACAAACATGCCCTTCAGAGTA	349	
Db	347	ACATTTCAACCTTGCTCTGCGACAGCCTTAGCGACAGTACACTGCCCTTCAGAGTG	406	
QY	350	CGGCTACTTGATCAATTTCTCGGCCCTTTGGGGATGTGTGCAAGATAGTAAATTTCCA	409	
Db	407	TCAACTACCTGATGGGAACATGGGCCCTTTGGAAACCATCTCTGCAAGATCGTGATCAA	466	
QY	410	TTGATTACTACAACATGTTACCAAGCATTTCACTTTGAACCATGATGAGCGTGGACCGCT	469	
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Db	527	ACATTGTGCTGCGACCCAGTCAAAAGCCCTGGATTTCCGTACCCCGCAATGGCAAAA	586	
QY	530	TCATCAATATCTGATCTGGCTGTCTGCTCATCTGTGTGGCATCTCTGCAATAGTCCCTTG	589	
Db	587	TCGTCAAGCTCTGCAACTGGATCTCTCTTCTGCCATCGGTCTGCCGTATGTTTCATGG	646	
QY	590	GAGGCAACAAAGTCAGGGAAGACGTGATGTCAATTGATGCTCCTTGGCAGTCCGAGTG	649	
Db	647	CAACCACAAAATACAGCGACGGGTC-----CATAGATTGCACCTCACGTTCTCCCAAC	700	
QY	650	ATGACTACTCTCGTGGGACCTTTTCATGAAGATCTCGCTCTTCATCTTTGCCCTTCGTGA	709	
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QY	710	TCCCTGTCTCATCATCATGTCTGTCTACACCTTGATGATCTCTGGTCTCAAGACGTCC	769	
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QY 770 GGCTCCTTTCTCGCTCCCGAGAGAAAGATCGCAACCTCGGTAGGATACACAGATGGTCC 829
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 QY 830 TGGTGGTGGTGCAGTCTTCGTGCTGCTGAGTCCCATTCACATATTCATCTCTGGTGG 889
 Db 878 TGGTGGTGGTGGTATTTATGCTGCTGAGACCCCATTCACATATTCATCTGATCA 937
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 Db 938 AAGCGCTGATACGATTCAGAAACCAATTCAGACGGTTTCTGCGCACTTCTGCAATG 997
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 QY 1070 CTAGCAGAGTCCGAATACAGTTCTAGGATCTGCTGCTTAC 1107
 Db 1118 CCACTCGAGTCCGTCAGAACACTAGGGAACATCCCTCC 1155

RESULT 39

RATMUOR1A 2135 bp mRNA linear ROD 21-OCT-1993
 Rattus norvegicus Mu opiate receptor (MUOR1) mRNA, complete cds.
 L20684
 L20684.1 GI:409149
 Mu opiate receptor.
 Rattus norvegicus (Norway rat)
 Rattus.norvegicus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.
 1 (bases 1 to 2135)
 Wang,J.B., Imai,Y., Eppler,C.M., Gregor,P., Spivak,C.E. and
 Uni.G.R.
 mu opiate receptor: cDNA cloning and expression
 Proc. Natl. Acad. Sci. U.S.A. 90 (21), 10230-10234 (1993)
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 Original source text: Rattus norvegicus (library: lambda ZAP
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FEATURES

source

gene

CDS

ORIGIN

Query Match

38.8%; Score 448; DB 10; Length 2135;

RESULT 40

Best Local Similarity 67.0%; Pred. No. 1.9e-72;
 Matches 669; Conservative 0; Mismatches 320; Indels 9; Gaps 2;
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RATROB      2397 bp      mRNA      linear      ROD 09-JAN-2003
DEFINITION   Rattus norvegicus ROR-B mRNA for opioid receptor B, complete cds.
ACCESSION   D16349
VERSION      D16349.1 GI:391866
KEYWORDS     G-protein coupled receptor.
SOURCE       Rattus norvegicus (Norway rat)
ORGANISM     Rattus norvegicus
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
              Rattus.
REFERENCE    1 (bases 1 to 2397)
AUTHORS      Fukuda K., Kato S., Mori K., Nishi M. and Takeshima H.
TITLE        Primary structures and expression from cDNAs of rat opioid receptor
              delta- and mu-subtypes
JOURNAL      FEBS Lett. 327 (3), 311-314 (1993)
MEDLINE      93351652
PUBMED       8394245
REFERENCE    2 (bases 1 to 2397)
AUTHORS      Takeshima H.
TITLE        Direct Submission
JOURNAL      Submitted (03-JUN-1993) Hiroshi Takeshima, International Institute
              for Advanced Studies; c/o Shimadzu Corporation N-80, 1
              Nishinokyo-Kuawahara-cho, Kyoto 604, Japan (Tel:81-75-823-1208,
              Fax:81-75-811-8186)
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ORIGIN
Query Match      38.8%; Score 448; DB 10; Length 2397;
Best Local Similarity 67.0%; Pred. No. 1,9e-72;
Matches 669; Conservative 0; Mismatches 320; Indels 9; Gaps 2;
QY 110 ACAGAACCGGACGCGGCTCGGAGGACGCGAGCTGGAGCCCGCGACATCTCCCGG 169
DB 320 ACCGACCGGGTTGGCGGGAACGACAGCCTGTGCCCTCAGACCGGAGCCCTCCATGG 379
QY 170 CCATCCCGGTATCATACGCGGGTCTACTCCGTAGTGTCTGCTGGGCTTGGGCA 229
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RESULT 41
RATMOPIOID
LOCUS      Rat mu opioid receptor mRNA, complete cds.
DEFINITION
ACCESSION L22455
VERSION    L22455.1 GI:437671
KEYWORDS   mu opioid receptor.
SOURCE     Rattus norvegicus (Norway rat)
ORGANISM   Rattus norvegicus
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
              Rattus.
REFERENCE  1 (bases 1 to 1401)
AUTHORS    Thompson,R.C., Mansour,A., Akil,H. and Watson,S.J.
TITLE      Cloning and pharmacological characterization of a rat mu opioid
              receptor
JOURNAL     Neuron 11 (5), 903-913 (1993)
MEDLINE     94059560
PUBMED      8240812
COMMENT     Original source text: Rattus norvegicus (strain Sprague-Dawley)
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source

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CDS

ORIGIN

Query Match 38.7%; Score 446.4; DB 10; Length 1401;
Best Local Similarity 66.9%; Pred. No. 3.7e-72;
Matches 568; Conservative 0; Mismatches 321; Indels 9; Gaps 2;

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DB |||||
QY 170 CCATCCCGGTATCATACAGCGGCTACTCGGTAGTGTTCGTCTGGCTTGGTGGCA 229
DB |||||
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Db 1017 TGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 1076
QY 890 AGGCTCTGGGGGACACCTCCACAGCAGCTGCTCTCTCCAGCTATTACTTCTGCATCG 949
Db 1077 AAGCGTGTATCCAGATTCAGAAACACATTTTCAGACGGTTCCTGGCAGCTTCGCAITG 1136
QY 950 CTTAGCGTATACCAACAGTAGCCTGATCCCATCTCTACGCCCTTTCTTGATGAAACT 1009
Db 1137 CTTTGGGTTTACAGAACAGCTGCTGAATCCAGTCTTTTACGCCCTTCTGGATGAAACT 1196
QY 1010 TCAAGCGGTGTTTCCGGGACTTCTGCTTTCCTCACTGAAGATGAGGATGAGCGGAGCA 1069
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QY 1070 CTAGCAGATCCGAAATACAGTTCAGGATCTGCTTAC 1107
Db 1257 CCACTCGCTCGTCCAGAACACTAGGGAACATCCCTCC 1294

RESULT 42

RNU02083
LOCUS
DEFINITION
Rattus norvegicus mu-opioid receptor mRNA, complete cds.
ACCESSION
U02083
VERSION
U02083.1 GI:403573
KEYWORDS
SOURCE
Rattus norvegicus (Norway rat)
ORGANISM
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE
1 (bases 1 to 1448)
Bunzow, J.R., Zhang, G., Bouvier, C., Saez, C., Ronnekleiv, O.K.,
Kelly, M.J., and Grandy, D.K. Characterization and distribution of a cloned rat mu-opioid
receptor
J. Neurochem. 64 (1), 14-24 (1995)
PUBMED
7798908
AUTHORS
Bunzow, J.R.
TITLE
Direct Submission
JOURNAL
Submitted (24-SEP-1993) James R. Bunzow, VIABR, Oregon Health
Sciences University, 3181 S.W. Sam Jackson Park Rd., Portland, OR
97201 USA
FEATURES
Location/Qualifiers
1. .1448
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ETAPLP"

Source

CDS

ORIGIN

Query Match 38.7%; Score 446.4; DB 10; Length 1448;
Best Local Similarity 66.9%; Pred. No. 3.7e-72;


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TITLE      Polynucleotide encoding mu opioid receptor
JOURNAL    Patent: US 6103492-A 3 15-AUG-2000;
FEATURES   Location/Qualifiers
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            source
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ORIGIN

[illegible]

Db	1241	TCAGCGATGCTTCAGAGAGTTCCTGCATCCCAACCTCGTCCAGATCGAACAGCAAAACT	1300
Qy	1070	CTAGCAGAGTCCGAATACAGTTTCAGGATCCTGCTTAC	1107
Db	1301	CCACTCGAGTCCGTCAGACACTAGGAGACATCCCTCC	1338
RESULT	46		
LOCUS	AR153354	1618 bp	linear
DEFINITION	Sequence 1 from patent US 6235496.		
ACCESSION	AR153354		
VERSION	AR153354.1	GI:15120896	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	Unclassified.		
	1 (bases 1 to 1618)		
AUTHORS	Yu, L.		
TITLE	Nucleic acid encoding mammalian mu opioid receptor		
JOURNAL	Patent: US 6235496-A 1 22-MAY-2001;		
FEATURES	Location/Qualifiers		
source	1..1618		
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ORIGIN			

ORIGIN	Query Match	38.7%; Score 446.4; DB 6; Length 1618;
	Best Local Similarity	66.9%; Pred. No. 3.7e-72;
	Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;	
Qy	110	ACAGCACGCGCGCGCTCGAGGACGCGAGCTGGAGCGCGGCACATCTCCCCG 169
Db	350	ACGCGACCGCGCTGGCGGAAAGACAGCGCTGCGCTCAGACGGGAGCCCTTCATGG 409
Qy	170	CCATCCCGGTCAATCACACGCGGTCTACTCCGTAGTGTTCGTCTGGGCTTGGTGCGCA 229
Db	410	TCAGCGCAATACCATCATCGCCCTCTACTCTATCGTGTGTAGTGGGCTCTTCGGAA 469
Qy	230	ACTCGCTGTGATCTTCGTGATCATCCGATACAAAGATGACAGACGACCAACATTT 289
Db	470	ACTTCCTGGTCAATGATGTAATGAATACACCAAAATGAAGATGCCACCAACATCT 539
Qy	290	ACATATTAACTCGGCTTTCGGAGATGCTTTAGTTACTACAACCATGCCCTTTCAGAGTA 349
Db	530	ACATTTCAACCTTGCTCTGGCAGACGCTTAGGACCAGTACACTGCCCTTTTCAGATG 589
Qy	350	CGGTCTACTGTGAATTCCTGGCCTTTTGGGAGATGCTGTGCAAGATAGTAATTTCCA 409
Db	590	TCAACTACCTGTATGGGAACATGGCCCTTCGGAAACCATCCTCTGCAAGATCGTGATCTCAA 649
Qy	410	TTGATTACTACAACATGTTTCAACAGCATCTTCACTTTGACCATGATGAGCGTGACCGCT 469
Db	650	TAGATTACTACAACATGTTTCAACAGCATATTCACCTCTTGACCATGAGCGTGACCGCT 709
Qy	470	ACATTCGCGTGTGCCACCCGCTGAAGCTTTGACATTCGCGCACACCTTTGAAGGCAAGA 529
Db	710	ACATTCGTGTGCCACCCAGTCAAAAGCCCTGGATTTCCGTACCCCGGAAATGCCAAA 769
Qy	530	TCATCAATATCTGCATCTGTGCTGTGTCATCTGTGTGSCATCTGTGCAATAGTCCTTG 589
Db	770	TCGTCAAGTCTGCACTGGATCCTCTCTCTGCCATCGTCTGCCTGTAAATGTTTATGG 829
Qy	590	GAGGCACCAAGATCAGGGAAGACGTGATGTCATAGTGTCTCTTGTCAGTTCCTCCAGTG 649
Db	830	CAACCAACAAATACAGGACGGGTC-----CATAGATTGACGCTCAGCTTCTCCACCC 883
Qy	650	ATGACTACTCCTGGTGGACCTTTCATGAAGATCTGCGCTTTCATCTTTGCTTCTGTGA 709
Db	884	CAACCTGGTACTGGGAGAACCTGCTC---AAATCTGTGCTTTATCTTCGCTTTCATCA 940
Qy	710	TCGCTGTCTCATCATCATCGTCTGTGTACACCTGATGATCCTGCGCTCAAGAGCGTCC 769

Eppendorf, Institut fuer Zellbiochemie & klinische Neurobiologie,
Martinistr. 52, 20246 Hamburg, FRG
Location/Qualifiers
1. .1231

FEATURES
source

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40. .1191
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CDS

ORIGIN

Query Match 38.6%; Score 445.8; DB 5; Length 1231;
Best Local Similarity 67.0%; Pred. No. 4.7e-72;
Matches 687; Conservative 0; Mismatches 317; Indels 21; Gaps 3;

QY	148	GAGCCGCGGACATCCCGGCGCATCCGGTATCATCAGCGGGTCTACTCCGTAGTG	207
DB	181	GAGCAGGACAAACCTCCCGTGATATCGCATCATCATCACCACCTTTGTATCCCATAGT	240
QY	208	TTTCGTCGCGGGCTGCTGGGCAACTCGTGGTTCATGTTTCGTGATCATCCGATACACAAAG	267
DB	241	TCCGTGTGGGACTGGTGGGCAACTCGTGGTTCATGTTTCGTGATCATCCGATACACAAAG	300
QY	268	ATGAAGACAGCAACCAACATTACATATTTAACTGCTTTGGCAGATGCTTTAGTTACT	327
DB	301	ATGAAGACAGCAACCAACATTACATATTTAACTGCTTTGGCAGATGCTTTAGTTACT	360
QY	328	ACAACCATGCGCTTTACAGATGAGTCTACTGATGATGATGATGATGATGATGATGATGATG	387
DB	361	AGTACTCTGCCATTTACAGATGCTAACCTGATGATGATGATGATGATGATGATGATGATG	420
QY	388	CTGTGCAAGATAGTAATTTCCATGATGATGATGATGATGATGATGATGATGATGATGATG	447
DB	421	GTCTGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	480
QY	448	ACCATGATGAGCGTGGACCGGTACATTTGCGGTGCGGACCGCGTGAAGCGCTTGGACTTC	507
DB	481	ACCACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	540
QY	508	CGCACACCTTGAAGCAAGATCATCAATATCTGATCTGCTGCTGCTGCTGCTGCTGCTGCTG	567
DB	541	AGAACACCGGTATGCGGAGATGTCACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG	600
QY	568	GGCATCTCTGCAATAGTCTTGGAGCGCAACCAAGTCAGGGA-----AGAC	612
DB	601	GGCCTCCCTGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATG	660
QY	613	GTGATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATG	672
DB	661	GTAGCACTTCGATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATGTCATG	717
QY	673	TTTCGAAGATCGGTCTTTCATCTTTGCTTTCGTGATCCCTGCTGCTGCTGCTGCTGCTGCTG	732
DB	718	CTCTGGAAGATCGGTCTTTCATCTTTGCTTTCGTGATCCCTGCTGCTGCTGCTGCTGCTGCTG	777
QY	733	TGCTACACCTGATGATGTCGTCGTCACAGCGTCCGCTCCTTTCGCTCCCGAGAG	792
DB	778	TGTTAGCGGCTTATGATGTCCTTCCGCTAAAGAGCGTACCGATGCTGCTGCTGCTGCTGCTG	837

QY	793	AAAGATCGCAACCTCGTAGGATCACACAGCTGGTCTCGTGGTGGTGGTGGTGGTGGTGGTGGT	852
DB	838	AAGATCGCAACCTCGTAGGATCACACAGCTGGTCTCGTGGTGGTGGTGGTGGTGGTGGTGGT	897
QY	853	GTCTGTGAGTCCCATTCACATATTCATCCCTGGTGGAGGCTCTCGGGAGCAGCTCCCAAC	912
DB	898	ATCTGTGAGCAGCCCAATCCACATCTTTGTTATCATCAAGGCCCTTGACCATTTCCCAAC	957
QY	913	AGCACAGCTGCTCTCTCCAGCTATTACTTCTGCATCGCCTTAGGCTATACCAACAGTAGG	972
DB	958	TCTCTATTCAGACCT	1017
QY	973	CTCAATCCCATTCCTCTACGCTTTTCTTGATGAAAACTTCAAGCGGTCTTTCCGGGACTTC	1032
DB	1018	CTCAACCCAGTCT	1077
QY	1033	TGCTTTCCCTGAGATGAGGATGAGGATGAGGATGAGGATGAGGATGAGGATGAGGATGAGG	1089
DB	1078	TGTGTTCTCTAGTCCCTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG	1137
QY	1090	GTTTCCAGGATCCT	1149
DB	1138	TGTGAGGCGCAGTCTAGTGGCCACAGGATGAGGATGAGGATGAGGATGAGGATGAGGATG	1197
QY	1150	GTGGA 1154	
DB	1198	CTGGA 1202	

RESULT 49
RNU35424
LOCUS
DEFINITION
Rattus norvegicus mu opioid receptor mRNA, complete cds.
ACCESSION
U35424
VERSION
U35424.1 GI:1017731
KEYWORDS
Rattus norvegicus (Norway rat)
SOURCE
Rattus norvegicus
ORGANISM
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE
1 (bases 1 to 1367)
Zastawny, R.L., George, S.R., Nguyen, T., Cheng, R., Teatsos, J.,
Briones-Urbina, R. and O'Dowd, B.F.
Cloning, characterization, and distribution of a mu-opioid receptor
in rat brain
J. Neurochem. 62 (6), 2099-2105 (1994)
MEDLINE
94246380
PUBMED
8189219
REFERENCE
2 (bases 1 to 1367)
O'Dowd, B.F.
Direct Submission
Submitted (05-SEP-1995) Brian F. O'Dowd, Pharmacology, University
of Toronto, 8 Taddle Creek Rd., Toronto, ON M5S 1A8, Canada
JOURNAL
Location/Qualifiers
FEATURES
source
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ETAPLP"

ORIGIN	Query Match	Best Local Similarity	38.5%; Score 444.8; DB 10; Length 1367;
Matches	667; Conservative	0; Mismatches 322; Indels	9; Gaps 2;
QY	110	ACAGCAACGGCAGCGCGGCTCGGAGACCGCAGCTGGAGCGCGGCACATCTCCCGG	169
Db	206	ACCGACACGGGCTTGGCGGGAACACACAGCTGTGCGCTCAGACCGGACGCCCTTCATGG	265
QY	170	CCATCCCGGTCAATCATCACGGCGGTCTACTCCGTAGTGTCTGCTGGGCTTGGTGGSCA	229
Db	266	TCACAGCCATTACCATCATGGCCCTCTACTCTATCGTGTGTAGTGGGCTCTTCGGAA	325
QY	230	ACTCGCTGGTCATGTTTCGTGATCATCCGATACACAAAGATGAAGACAGCAACCAATTT	289
Db	326	ACTTCTCGTCATGTATGTGATTTAGATACACCAAAATGAAGATCGCCACCAACATCT	385
QY	290	ACATATTAACTCGCTTTGGCAGATGCTTTAGTTACTACAAACCATGCCCTTCAGAGTA	349
Db	386	ACATTTTTCACCTTGCTCTGGCAGACGCCCTTAGCACCAGTACATGCGCTTCAGATG	445
QY	350	CGGCTACTTGATGAATTCCTGGCTTTTGGGAGTGTCTGTGCAAGTAGTAATTTCCA	409
Db	446	TCAACTACTGATGGGAACATGGCCCTTCGGAACCATCTCTGCAAGATCGTGATCTCAA	505
QY	410	TTGATTACTACACATGTTCAACGAGCATCTTCACCTTGACATGATGAGCGGTGACCGCT	469
Db	506	TAGATTACTACAAATGTTTACCAGACATATTCACCTCTGCAACCATGAGCGTGACCGCT	565
QY	470	ACATTCGCGTGTGCCACCCCGCTGAAGGCTTTGGACTTCGCGCACACCTTTGAAGCAAGA	529
Db	566	ACATTTGCTGTGCCACCCAGTCAAAAGCCCTGGATTTCCGTACCCCGCAATGCCAAA	625
QY	530	TCATCAATATCTGCATCTGGCTGTGTGTCATCTGTGGCATCTCTGCAATAGTCTCTTG	589
Db	626	TCGTCAACGTCTGAAGTGATCTCTCTTCTGCCATCGGCTGCGCTGTAAATGTTCAATG	685
QY	590	GAGGCACCAAAAGTCAGGGAAGAGCGTCCATGTCATTGAGTGTCTTCGAGTTCCACATG	649
Db	686	CAACCACAAAATACAGCGAGGGTC-----CATAGATTGCACCTCACGTTCTCCACC	739
QY	650	ATGACTACTCTGTGGGACCTCTTCATGAAGATCTGGGTCTTCATCTTGCCTTCGTGA	709
Db	740	CAACCTGTACTGGGGAACCTGCTC---AAATCTGTTCGGGATCTTCGCTTTTCATCA	796
QY	710	TCCCTGTCTCATCATCATCGTCTGTCTACACCTGATGATCTCGGTCTCAAGAGCGTCC	769
Db	797	TGCCGGTCTCATCATCACTGTGTGTTCGGCTGTGATCTTACGCTCAAGAGCGTTC	856
QY	770	GGCTCTTTCTGGCTCCCGAGAAAGATCGCAACTGCTAGGATCACCAAGATCGGTCC	829
Db	857	GCATGCTATCGGGCTCAAAAGAAAAGACAGGAATCTGCGCAGGATCACCCGGATGCTGC	916
QY	830	TGCTGGTGGTGGAGTCTTCGTCTGTCTGGACTCCCATTCACATATTCATCTCTGTGG	889
Db	917	TGGTGGTGGTGGTGTATTTATCGTCTGTGGACCCCATCCACATCTACGCTCATATCA	976
QY	890	AGGCTCTGGGAGCACCTCCACAGCACAGCTGCTCTCTCCAGCTATTATCTTCGATCG	949
Db	977	AAGCGTGATCACGATTTCCAGAAACACCATTTACAGACCGTTTCCTGGGCATCTTCGATTG	1036
QY	950	CCTTAGGCTATACCAACAGTAGCTGAATCCCATTTCTCTAAGCCTTTCTTGATGAAAAC	1009
Db	1037	CTTTGGGTTACAGAACAGCTGCTGAATCCAGTTCTTTAGCGCTCTCTGGATGAAAAC	1096
QY	1010	TCAAGCGGTGTTTCCGGGACTTCTGCTTTCCACTGAAGATGAGGATGAGCGGCAGAGCA	1069
Db	1097	TCAAGCGATGCTTCAGAGAGTCTTGATATCCCAACCTGCTCACAGTCGACAGCAAACT	1156
QY	1070	CTACAGAGTCCGAAATACAGTTTCAGGATCTCTGCTTAC	1107
Db	1157	CCACTCGAGTCCGTCAGAACACATPAGGGAACATCCCTCC	1194

RESULT 50	AY036622	1464 bp	mrna	linear	PRI 31-DEC-2002
LOCUS	AY036622				
DEFINITION	Homo sapiens mu opioid receptor variant MOR-1R (OPRM) mRNA, complete cds, alternatively spliced.				
ACCESSION	AY036622				
VERSION	AY036622.1	GI:27446645			
KEYWORDS					
SOURCE	Homo sapiens (human)				
ORGANISM	Homo sapiens				
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
AUTHORS	Pan, Y., Xu, J., Xu, M. and Pasternak, G. W.				
TITLE	Isolation and characterization of a splice variant of human mu opioid receptor gene (OPRM)				
JOURNAL	Unpublished				
REFERENCE	Pan, Y., Xu, J., Xu, M. and Pasternak, G. W.				
AUTHORS	Direct Submission				
TITLE	Submitted (26-MAY-2001) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA				
JOURNAL	Location/Qualifiers				
FEATURES	<p>1..1464</p> <p>/organism="Homo sapiens"</p> <p>/mol_type="mrna"</p> <p>/db_xref="taxon:9606"</p> <p>/chromosome="6"</p> <p>/map="6q24-25"</p> <p>1..1464</p> <p>/gene="OPRM"</p> <p>50..1390</p> <p>/gene="OPRM"</p> <p>/note="alternatively spliced; exon 4 of the MOR-1 gene is replaced by a new exon"</p> <p>/codon_start=1</p> <p>/product="mu opioid receptor variant MOR-1R"</p> <p>/protein_id="AAK74189.1"</p> <p>/db_xref="GI:27446646"</p> <p>/translation="WDSSAAPNASNCTDALAYSSCPAPSPGSMVNLSHLDGNLSDP CGPNRTDGGSDSLCPPTGSSPMTAITMALYSIVCVVGLFGNPLUMVYLVRYTKMK TATNIYIFNLADALASTLPQSVNYLMGTPPGTILCKIVISIDYNNFTSIFT CMTSDRYAVCHPVKADLDFPRNAKINVCNILLSAIGLPPVFMFMATTKRQSGID CLTMSFTYWNELKICVFIFAFIMPLVITVCYGLMILKLSVMTLSGSKGKDRN LRRIRMLVNVAVICWPTPIHVIIVKALVTIPETTFQVSWHFICIALGYTNSCLRN PVLYALDENKRCRFRECIPTSSINEQNSTRIQTRDPHSTANTVDRTNHQCLPI PSLSCWALEHGLVYVPGPLQGLVRYDLPLAILHSSCLRGNTAPSPGCAFLLS"</p>				
gene					
CDS					
ORIGIN					
Query Match	37.8%;	Score 436.2;	DB 9;	Length 1464;	
Best Local Similarity	64.7%;	Pred. No. 2.8e-70;			
Matches 683;	Conservative	0;	Mismatches 363;	Indels 9;	Gaps 2;
QY	92	CCGGCTGGGCCGAGCCGACAGCAACGCGACGCGCGCTCGGAGACGCGAGCTGGAGC	151		
Db	174	CCGACCCATGCGGTCCGAACCGCACCGACCTGGCGGGGAGAGACAGCGCTGTGCCCTCCGA	233		
QY	152	CCGCGGCACATCTCCCGGCCATCCCGGTCAATCATCACGCGGCTTACTCCGTAGTGTTCG	211		
Db	234	CCGGCAGTCCCTCCATGATCAACGCGCATCAGATCATGGCCCTCTACTCCATCGGTGCG	293		
QY	212	TCGTGGGCTTGTGGGCAACTCGCTGGTCAATGTCGTGATCATCCGATACACAAGATGA	271		
Db	294	TGCTGGGCTCTTCGGAAACTTCTCGTCAATGATGATGTCAGATACACCAAGATGA	353		
QY	272	AGACAGCACCAACATTTACATATTACCTGGCTTTGGCAGATGCTTTAGTTACTACAA	331		
Db	354	AGACTGCCACCAACATACATATTTCAACCTTGCTCTGGCAGATGCCCTTAGCCACGATA	413		
QY	332	CCATGCCCTTTCAGAGTAGCGGTCTACTTTGATGAATTCCTGGCCCTTTTGGGATGTGCTGT	391		

Db	414	CCCTGCCCTCCAGAGTGTGAATTACCTAATGGGAACATGCCCATTTGGAAACCATCTCTT	473
Qy	392	GCAAGATAGTAATTTCCATTGATTACTACAAACATGTTCCACAGCATCTTCACCTTGACCA	451
Db	474	GCAAGATAGTGTATCTCCATAGATTACTATAACATGTTCCACAGCATATTACCCCTCTGCA	533
Qy	452	TGATGACGTGGACCGCTACATTCGCCGTGTGCCACCCCGTGAAGCCTTGGACTTCCGCA	511
Db	534	CCATGAGTGTGATCGATACATTGCACTGTGCCACCCGTCAAGGCGCTTAGATTCCGTA	593
Qy	512	CACCCTTGAAGGCAAAAGATCATCAATATCTGCATCTGCCTGCTGTGCTCATCTGTTGGCA	571
Db	594	CTCCCCGAATGCCAAATTTATCAATGTCTGCAACTGGATCCTCTCTTCAGCCATTTGTC	653
Qy	572	TCCTCTGCAATAGTCTTTGGAGGCCACAAAGTCAAGGAAGAGTCGATGTCAATTGAGTGC	631
Db	654	TTCTCTGTAATGTTTCATGGCTACAAACAAATACAGGCAA-----GGTTCCATAGATTGTA	707
Qy	632	CCTTGCAAGTTCACAGATGATGACTACTCTCCTGGTGGGACCTCTTCATGAAGATCTGGCT	691
Db	708	CACTAACATTCTC---TCATCCAACTCTGGTACTGGGAAACCTGCTCAAGATCTGTGTTT	764
Qy	692	TCATCTTTGCTTCGTGATCCCTGCTCTCATCATCATCTGCTGTGTACACCTGATGATCC	751
Db	765	TCATCTTCGGCTTCATTATGCCAGTGTCTCATCATTAACGGTGTCTATGGACTGATGATCT	824
Qy	752	TGGGTCTCAAGAGCGTCCGGCTCCTTTCTTGCTCCGAGAGAAAGATCGCAACCTGCGTA	811
Db	825	TGCGCCTCAAGAGTGTCCGCGATGCTCTCTGGCTCCAAAGAAAAGGACAGGAATCTTCGAA	884
Qy	812	GGATCACAGACTGGTCTCTGGTGTGTGGCAGTCTTCGTGCTGTGCTGAGACTCCCATTC	871
Db	885	GGATCACAGGATGGTCTGGTGTGTGGTGTGTGTTTCATCGTCTGTGAGCTCCCATTC	944
Qy	872	ACATATTATCTCCTGGTGAGGCTCTGGGAGCACTGCCACAGCACAGCTGCTCTCTCCA	931
Db	945	ACATTTACGTCATCATTTAAGCCTTGGTTACAATCCAGAAACTACGTTCCAGACTGTTT	1004
Qy	932	GCTATTACTTCTGATCCGCTTATAGGCTATACCAACAGTAGCCTGAATCCCATTTCTTACG	991
Db	1005	CTTGGCACTCTGCAATTGCTTAGGTTTACACAAACAGCTGCTCAACCCAGTCTCTTTATG	1064
Qy	992	CCTTTCTTGATGAAAACCTTCAAGCGGTGTTTCGGGACTTCTGCTTTTCCACTGNAAGTA	1051
Db	1065	CATTTCCTGGATGAAAACCTTCAACGATGCTTCAGAGAGTTCTGTATCCCAACCTCTTCCA	1124
Qy	1052	GGATGAGCGGCAGACACTAGCAGAGTCCGAAATACAGTTCAGGATCTGCTTACCTCGA	1111
Db	1125	ACATTGAGACACAAAACCTCCACTCGAATTCGTGAGACACTAGAGACCAACCCCTCCACGG	1184
Qy	1112	GGGACATCGATGGGATGAATAAACCAGATGACTA	1146
Db	1185	CCAATACAGTGGATAGAACTAATCATCAGTGCCTA	1219

RESULT 51	
LOCUS	AY036623
DEFINITION	1388 bp mRNA linear PRI 31-DEC-2002
DESCRIPTION	Homo sapiens mu opioid receptor variant MOR-1C (OPRM) mRNA, complete cds, alternatively spliced.
ACCESSION	AY036623
VERSION	AY036623.1
KEYWORDS	GI:27445647
SOURCE	Homo sapiens (human)
ORGANISM	Homo sapiens
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Caranthini; Hominidae; Homo.
AUTHORS	Pan, Y., Xu, J., Xu, M. and Pasternak, G.W.
TITLE	Cloning and characterization of splice variant MOR-1C of the human mu opioid receptor gene
JOURNAL	Unpublished
REFERENCE	2 (bases 1 to 1388)

AUTHORS	TITLE	JOURNAL	FEATURES	SOURCE
...

Pan, Y., Xu, J., Xu, M. and Pasternak, G. W.
Direct Submission
Submitted (126-MAY-2001) Neurology, Menn
Center, 1275 York Ave, New York, NY 100
Location/Qualifiers
1. .1388

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CDS

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50. .1306

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ORIGIN

Query Match 37.7%; Score 434.8; DB 9; Length 1388;
Best Local Similarity 66.3%; Pred. No. 5e-70;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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Db	234	CCGGCAGTCCCTCCATGATCAOGGCCATACGATCATGGCCCTCTACTCCATCGTGTGCG	293
Qy	212	TCGTGGGCTTGGTGGGCACTCGCTGGTCATGTTCTGTGATCATCCGATACACAAAGATGA	271
Db	294	TGTGGGGCTCTTTCGGAACTTCCTGGTCATGTATGTGATTGTCAGATACCCAAAGATGA	353
Qy	272	AGACAGCAACCAACATTTACATATTTAAACCTGGCTTTGGCAGATGCTTTAGTTACTACAA	331
Db	354	AGACTGCCACCAACATCTACATTTTCAAACCTTGCTCTGGCAGATGCTTAGCCACCAGTA	413
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Qy	392	GCAAGATAGTAAATTTCCATTGATTACTACAACATGTTTCACAGCATCTTCACCTTGACCA	451
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Qy	512	CACCCCTTGAGGCAAAAGATCATCAATATCTGCAATCTGGCTGTGTGCTCATCTGTTGGCA	571
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Qy	572	TCTCTGCATAGTCCCTTGGAGGACCAAAAGTCAGGGAAGACGTGTCATTTGAGTGCT	631
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    Query Match          37.7%; Score 434.8; DB 9; Length 1610;
    Best Local Similarity 66.3%; Pred. No. 5e-70;
    Matches 560; Conservative 0; Mismatches 327; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGAGCCGACAGCAAGCGCGCGCTCGGAGGACGGCAGCTGGAGC 151
DB 363 CCGACCCATCGGCTCCGACCGCACCGACCTGGCGGAGAGACAGCGCTGCGCTCCGA 422
QY 152 CCGGCGACATCTCCCGGCGCATCCCGGTCAATCATCAGCGCGGTCTACTCCGTAGTGTTCG 211
DB 423 CCGGCGAGTCCCTCCCATGATACGGCCATCAGATCATGGCCCTCTACTCCATCGTGTGCG 482
QY 212 TCGTGGGCTTGGTGGGCACTCGTGTGATGTTGCTGATCATCGATACACAAAGATGA 271
DB 483 TGGTGGGCTCTTCGAAACTTCCTGGTCATGTATGTGATTGTGATGATACACCAAGATGA 542
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ORIGIN

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RESULT 54
LOCUS       ARI62044
DEFINITION  Sequence 1 from patent US 6258556.
ACCESSION  ARI62044
VERSION     ARI62044.1 GI:16229099
KEYWORDS   Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 2160)
AUTHORS   Uhl,G., Johnson,P., Persico,A.M. and Wang,J.Bei.
TITLE     cDNA and genomic clones encoding human .mu. opiate receptor and the
          purified gene product
JOURNAL    Patent: US 6258556-A 1 10-JUL-2001;
FEATURES   Location/Qualifiers
            source          1..2160
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    Query Match          37.7%; Score 434.8; DB 6; Length 2160;
    Best Local Similarity 66.3%; Pred. No. 5e-70;
    Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGAGCCGACAGCAAGCGCGCGCTCGGAGGACGGCAGCTGGAGC 151
DB 337 CCGACCCATCGGTCGCGAACCGCACCACTGGCGGAGAGACAGCGCTGTGCCCTCCGA 396
QY 152 CCGGCGACATCTCCCGGCGCATCCCGGTCAATCATCAGCGCGGTCTACTCCGTAGTGTTCG 211
DB 397 CCGGCGAGTCCCTCCATGATCAGCGCCATCAGATCATGGCCCTCTACTCCATCGTGTGCG 456
QY 212 TCGTGGGCTTGGTGGGCACTCGCTGTCATGTTGCTGATCATCCGATACACAAAGATGA 271
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RESULT 54

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LOCUS       ARI62044
DEFINITION  Sequence 1 from patent US 6258556.
ACCESSION  ARI62044
VERSION     ARI62044.1 GI:16229099
KEYWORDS   Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 2160)
AUTHORS   Uhl,G., Johnson,P., Persico,A.M. and Wang,J.Bei.
TITLE     cDNA and genomic clones encoding human .mu. opiate receptor and the
          purified gene product
JOURNAL    Patent: US 6258556-A 1 10-JUL-2001;
FEATURES   Location/Qualifiers
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    Query Match          37.7%; Score 434.8; DB 6; Length 2160;
    Best Local Similarity 66.3%; Pred. No. 5e-70;
    Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGAGCCGACAGCAAGCGCGCGCTCGGAGGACGGCAGCTGGAGC 151
DB 337 CCGACCCATCGGTCGCGAACCGCACCACTGGCGGAGAGACAGCGCTGTGCCCTCCGA 396
QY 152 CCGGCGACATCTCCCGGCGCATCCCGGTCAATCATCAGCGCGGTCTACTCCGTAGTGTTCG 211
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QY 392 GCAAGATAGTAATTTCCATTTGATTAACAACATGTTTACCAGCATCTTCACCTTGACCA 451
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LOCUS

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DEFINITION  Sequence 1 from patent US 6258556.
ACCESSION  ARI62044
VERSION     ARI62044.1 GI:16229099
KEYWORDS   Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 2160)
AUTHORS   Uhl,G., Johnson,P., Persico,A.M. and Wang,J.Bei.
TITLE     cDNA and genomic clones encoding human .mu. opiate receptor and the
          purified gene product
JOURNAL    Patent: US 6258556-A 1 10-JUL-2001;
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    Best Local Similarity 66.3%; Pred. No. 5e-70;
    Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGAGCCGACAGCAAGCGCGCGCTCGGAGGACGGCAGCTGGAGC 151
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QY 392 GCAAGATAGTAATTTCCATTTGATTAACAACATGTTTACCAGCATCTTCACCTTGACCA 451
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DEFINITION

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Sequence 1 from patent US 6258556.

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ACCESSION

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ARI62044

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VERSION

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ARI62044.1 GI:16229099

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KEYWORDS

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Unknown.

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ORGANISM

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Unknown.

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REFERENCE

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1 (bases 1 to 2160)

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AUTHORS

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Uhl,G., Johnson,P., Persico,A.M. and Wang,J.Bei.

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TITLE

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cDNA and genomic clones encoding human .mu. opiate receptor and the
purified gene product

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JOURNAL

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Patent: US 6258556-A 1 10-JUL-2001;

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Query Match          37.7%; Score 434.8; DB 6; Length 2160;
Best Local Similarity 66.3%; Pred. No. 5e-70;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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QY 92 CCGGCTGGGCGAGCCGACAGCAAGCGCGCGCTCGGAGGACGGCAGCTGGAGC 151
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QY 392 GCAAGATAGTAATTTCCATTTGATTAACAACATGTTTACCAGCATCTTCACCTTGACCA 451
DB 637 GCAAGATAGTATCTCCATAGATTACTATAACATGTTTACCAGATATTCCACCTCTGCA 696

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VERSION      AR181331.1  GI:20223545
KEYWORDS
SOURCE       Unknown.
ORGANISM     Unknown.
REFERENCE    1 (bases 1 to 2162)
AUTHORS      Kreek,M.Jeanne., LaForge,K.Steven., Yu,L. and Tischfield,J.A.
TITLE        Alleles of the human mu opioid receptor and diagnostic methods
              based thereon
JOURNAL      Patent: US 6335168-A 1 01-JAN-2002;
FEATURES     Location/Qualifiers
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Best Local Similarity 66.3%; Pred. No. 5e-70;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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DB  1228  CATTTCTGGATGAAAACTTCAAAACGATGCTTACAGAGATTCTGTATCCCAACCTCTCCA 1287
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ACCESSION  AR182295
VERSION    AR182295.1  GI:20225211
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 2162)
AUTHORS    Kreek,M.Jeanne., LaForge,K.Steven., Yu,L. and Tischfield,J.A.
TITLE      Alleles of the human mu opioid receptor, diagnostic methods using
              said alleles, and methods of treatment based thereon
JOURNAL    Patent: US 6337207-A 1 08-JAN-2002;
FEATURES   Location/Qualifiers
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Best Local Similarity 66.3%; Pred. No. 5e-70;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

QY  92  CCGGCTGGCGGAGCCGAGCAGCAACGCGCGGCTCGGAGGACCGCAGCTGGAGC 151
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DB  577  CCCTGCGCTTCCAGAGTGAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 636
QY  392  GCAAGATAGTAATTTCAATTTGATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 451
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 SOURCE Unknown.
 ORGANISM
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 ORGANISM 1 (bases 1 to 2162)
 Au-Young, J. and Seilhamer, J.J.
 TITLE Composition for the detection of signaling pathway gene expression
 JOURNAL Patent: US 6500938-A 1379 31-DEC-2002;
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Query Match 37.7%; Score 434.8; DB 6; Length 2162;
 Best Local Similarity 66.3%; Pred. No. 5e-70;
 Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

QY 92 CCGGCTGGGCGAGCCGACAGCAACGCGAGCGCGGCTCGGAGGAGCGCAGCTGGAGC 151
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 SOURCE Unclassified.
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 Hoehe, M. and Wendel, B.
 TITLE Genomic sequence of the human .mu.-opioid receptor gene and the
 variants, polymorphisms and mutations thereof
 JOURNAL Patent: US 6538120-A 7 25-MAR-2003;
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Best Local Similarity 66.3%; Pred. No. 5e-70; Indels 9; Gaps 2;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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DEFINITION Sequence 185 from Patent WO02061087.
ACCESSION AX548900
VERSION AX548900.1 GI:25813759
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MAMMALIA; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
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AUTHORS Burmer, G.C., Roush, C.L. and Brown, J.P.
TITLE Antigenic peptides, such as for G protein-coupled receptors (GPCRs), antibodies thereto, and systems for identifying such antigenic peptides
JOURNAL Patent: WO 02061087-A 185 08-AUG-2002;
Lifespan Biosciences, Inc. (US)
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Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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Bare, L.A., Mansson, E. and Yang, D.
SK-N-SH cells and human brain
Expression of two variants of the human mu opioid receptor mRNA in
FEBS Lett. 354 (2), 213-216 (1994)
95046336
PUBMED
7957926
AUTHORS
Wang, J.B., Johnson, P.S., Persico, A.M., Hawkins, A.L., Griffin, C.A.
and Uhl, G.R.
Human mu opiate receptor. cDNA and genomic clones, pharmacologic
characterization and chromosomal assignment
FEBS Lett. 338 (2), 217-222 (1994)
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AUTHORS
Bare, L.A.
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 AUTHORS Abood,M.E.
 TITLE Molecular cloning and expression of a rat delta opioid receptor
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 JOURNAL J. Neurosci. Res. 27, 714-719 (1994)
 REFERENCE 2 (bases 1 to 1366)
 AUTHORS Abood,M.E.
 TITLE Direct Submission
 JOURNAL Submitted (09-AUG-1993) Mary E. Abood, Pharmacology and Toxicology,
 Medical College of Virginia/Virginia Commonwealth University, 1112
 E. Clay St., Richmond, VA 23298, USA
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 DEFINITION D16348
 ACCESSION D16348.1 GI:391864
 VERSION D16348.1
 KEYWORDS G-protein coupled receptor.
 Rattus norvegicus (Norway rat)
 SOURCE Rattus norvegicus
 ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
1 (bases 1 to 1418)
Fukuda, K., Kato, S., Mori, K., Nishi, M. and Takeshima, H.
Primary structures and expression from cDNAs of rat opioid receptor
delta- and mu-subtypes
FEBS Lett. 327 (3), 311-314 (1993)
93351652
8394245
2
Wang, J. B., Johnson, P. S., Imai, Y., Persico, A. M., Ozenberger, B. A.,
Eppler, C. M. and Uhl, G. R.
cDNA cloning of an orphan opiate receptor gene family member and
its splice variant
FEBS Lett. 348 (1), 75-79 (1994)
94298959
8026588
3 (bases 1 to 1418)
Takeshima, H.
Direct Submission
Submitted (03-JUN-1993) Hiroshi Takeshima, International Institute
for Advanced Studies, c/o Shimadzu Corporation N-80, 1
Nishino-kyo-Kawahara-cho, Kyoto 604, Japan (Tel:81-75-823-1208,
Fax:81-75-811-8186)
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ORIGIN
Query Match 37.5%; Score 432.6; DB 10; Length 1418;
Best Local Similarity 68.2%; Pred. No. 1.3e-69;
Matches 635; Conservative 0; Mismatches 284; Indels 12; Gaps 2;
QY 107 CGACAGCAACGCGCGCGCTGGAGGAGCGCAGCTGAGCGCGGCACATCTCC 166
DB 182 CTTTCCCGAGTCGAGCGCAATCGTGGGGTCCCGCGCGCGCGCTCGTCCC 241
QY 167 CGGCCATCCCGGTCAATCAGCGGCTTACTCCGTAGTGTCTCGTGGGCTTGGTGG 226
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DB 302 GCAACGTGCTGCTCATGTTTGAATCGTCCGCTACACTAAGCTGAAGACGGCCACACA 361
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DB 362 TCTACATCTTCACTTGGCTTGGCGATGCGCTGCCACACGACACTGCCCTTCCAGA 421
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QY 527 AGATCATCAATATCTGCATCTGGCTGCTGCTGCTCATCTGTGTGCAATCTCTGCAATAGTCC 586
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QY 587 TTGGAGGACCAAGATCAGGAGAGCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 646
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LOCUS AF346812
DEFINITION Mus musculus mu opioid receptor variant P (Oprm) mRNA, complete
cds, alternatively spliced.
ACCESSION AF346812
VERSION AF346812.1 GI:27448122
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
REFERENCE 1 (bases 1 to 1438)
AUTHORS Pan, Y.-X., Xu, J. and Pasternak, G.
TITLE Identification and characterization of four splice variants of
mouse mu opioid receptor gene
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1438)
AUTHORS Pan, Y.-X., Xu, J. and Pasternak, G.
TITLE Direct Submission
JOURNAL Submitted (08-FEB-2001) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave, New York, NY 10021, USA
FEATURES
source
1. 1438
/organism="Mus musculus"
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Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

QY 92 CCGGTGGGCGAGCCGACACGAGCGCGGTGCGAGGACCGGAGCTGGAGC 151
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Db 185 CCGAGCCCATCGCGTCTAACCACGCGGGCTTGGCGGAGCCACAGCCTGCGCCTCAGA 244
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Db 245 CCGGAGCCCTTCATGTGTACAGCATCACCATGCGCCCTTATCTATCGTGTG 304
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QY 212 TCGTGGGCTTGGGCACTCGCTGTCATGTCGTGATCATCGATACGATACCAAGATGA 271
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RESULT 67

AR269386
LOCUS AR269386 1334 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 3 from patent US 650927.
ACCESSION AR269386
VERSION AR269386.1 GI:29700547
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 1334)
AUTHORS Pasternak, G. and Pan, Y.-X.
TITLE Identification and characterization of multiple splice variants of
the mu-opioid receptor gene
JOURNAL Patent: US 650927-A 3 31-DEC-2002;
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Query Match 37.5%; Score 432.4; DB 6; Length 1334;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

QY 92 CCGGTGGGCGGACCGGACGAGCGCGGTGCGAGGACCGGAGCTGGAGC 151
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DEFINITION		complete cds.	
ACCESSION	AF074973		
VERSION	AF074973.1	GI:5805152	
KEYWORDS			
SOURCE		Mus musculus (house mouse)	
ORGANISM			
		Mus musculus	
		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
		Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus.	
REFERENCE		Pan,Y.-X., Xu,J., Bolan,E., Abbadie,C., Chang,A., Zuckerman,A.,	
AUTHORS		Rossi,G. and Pasternak,G.W.	
TITLE		Identification and characterization of three new alternatively	
JOURNAL		spliced mu-opioid receptor isoforms	
MEDLINE		Mol. Pharmacol. 56 (2), 396-403 (1999)	
PUBMED		99348417	
REFERENCE		2 (bases 1 to 1334)	
AUTHORS		Pan,Y.-X., Xu,J., Wan,B.-L., Zuckerman,A.B., Rossi,G.C.,	
		Leventhal,L. and Pasternak,G.W.	
TITLE		Direct Submission	
JOURNAL		Submitted (29-JUN-1998) Neurology, Memorial Sloan-Kettering Cancer	
		Center, 1275 York Ave, New York, NY 10021, USA	
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Query Match		37.5%; Score 432.4; DB 10; Length 1334;	
Best Local Similarity		65.8%; Pred. No. 1.4e-69;	
Matches 663; Conservative		0; Mismatches 336; Indels	
		Gaps 9;	
		Gaps 2;	
QY	92	CCGCGTGGCGGCCGAGCACCAACGGCAGCGCGCGGTCCGAGAGCAGCGAGCTGGAGC	151

QY 632 CTTTGCAGTTCACAGATGATGACTACTCTCTGGTGGGACCTCTTTCATGAGATCTCGGTCT 691
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RESULT 72
AY160190
LOCUS
DEFINITION Mus musculus mu opioid receptor variant CII (Oprm) mRNA linear ROD 01-DEC-2003
cds; alternatively spliced.
ACCESSION AY160190
VERSION AY160190.1 GI:37724702
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE Xu, J. and Pasternak, G.W.
AUTHORS Xu, J. and Pasternak, G.W.
TITLE Identification and characterization of a new isoform from mouse mu opioid receptor gene Oprm
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1373)
AUTHORS Xu, J. and Pasternak, G.W.
TITLE Direct Submission
JOURNAL Submitted (07-OCT-2002) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021, USA
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ORIGIN
Query Match 37.5%; Score 432.4; DB 10; Length 1373;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
QY 92 CCGCTGGGCGGAGCGAGCAAGCGGAGCCCGGCTCGGAGGACGGCGAGCTGGAGC 151
Db 185 CCGACCCATCGGTCTCTAACCGCACGGGGCTTGGCGGAGCCACAGCTGTGCGCTCAGA 244
QY 152 CCGCGCACATCTCCCGGCGCATCCCGGTCTATCATCAGCGGGTCTACTCCGTAGTGTG 211
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QY 332 CCATGCGCTTTCAGAGTACGGTCTACTTGTATGATGATGATGATGATGATGATGATGATGAT 391
Db 425 CGCTGCGCTTTCAGAGTGTAACTACTGATGGAACTGGGCTTGGAAACATCCTCT 484
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Db 836 TACGACTCAAGAGTCTCGCATGCTCTCGGCTTCAAAGAAAGGACAGGAACCTCGCA 895
QY 812 GGATCACCAGACTGCT 871
Db 896 GGATCACCAGAGTGGTCT 955
QY 872 ACATATTCATCT 931
Db 956 ACATCTATGTCATCAAGACATGATCATGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1015
QY 932 GCTATATCTCTGATCT 991
Db 1016 CTTGCACTTCT 1075

Qy	992	CTTTCTTGATGAAAACTTCAAGCGGTGTTTCGGGACTTCTGCTTTCCACTCGAAGATGA	1051			
Db	1076	CGTTCCTGGATGAAACTTCAACGATGTTTTAGAGAGTTCTGCATCCCAACTTCTCTCCA	1135			
Qy	1052	GGATGGAGCGCGACAGCACTAGCAGAGTCCGAATAACAGTTTCAGGATC	1099			
Db	1136	CAATCGACACAGCAAACTCTGCTCGATCCGTCAAAACACTAGGGAAC	1183			
RESULT 73						
AR269384						
LOCUS	AR269384	1423 bp	DNA linear PAT 10-APR-2003			
DEFINITION	Sequence 1 from patent US 6500927.					
ACCESSION	AR269384					
VERSION	AR269384.1 GI:29700545					
KEYWORDS	.					
SOURCE	Unknown.					
ORGANISM	Unknown.					
REFERENCE	Unclassified.					
AUTHORS	1 (bases 1 to 1423)					
TITLE	Pasternak, G. and Pan, Y.-X.					
JOURNAL	Identification and Characterization of multiple splice variants of					
FEATURES	the mu-opioid receptor gene					
source	Patent: US 6500927-A 1 31-DEC-2002;					
	Location/Qualifiers					
	1..1423					
	/organism="unknown"					
ORIGIN	/mol_type="genomic DNA"					
Query Match						
Best Local Similarity 37.5%; Score 432.4; DB 6; Length 1423;						
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;						
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Qy	152	CCGGGCACATCTCCCGGCCATCCGGGTATCATCATCGCGGGTCTACTCGTGTGTTCTG	211			
Db	245	CCGGCAGCCCTTCATGGTCAAGCCATCACCATCATGGCCCTCTATCTATCGTGTGTG	304			
Qy	212	TCGTGGGCTTGGTGGGCAACTCGCTGGTCTATGTTCTGTGATCATCCGATACACAAAGATGA	271			
Db	305	TAGTGGGCTCTTTGGNAACCTTCCTGGTCATGTATGTGATTGTAAATATACCAATGA	364			
Qy	272	AGACAGCAACCAATTTACATTTAACTGGCTTTGGCAGATGCTTAGTTACTACAA	331			
Db	365	AGATCGCCACCAACATCATATTTCAACCTTGCTCTGGCAGATGCTTAGGCACATGCA	424			
Qy	332	CCATGCCCTTTACAGATGACGGTCTACTTTGATGAATCTCGGCCCTTTTGGGAGTGTCTGT	391			
Db	425	CGCTGCCCTTTACAGATGTTAACTACTGATGGGAAGTGGGCCCTTTGGNAACATCTCT	484			
Qy	392	GCAAGATAGPAAATTTCCATTGATTACTACAAATGTTTCAACGATCTTCACTTACCA	451			
Db	485	GCAAGATCGTGATCTCAATAGACTACTACAAACATGTTACAGTATCTTCAACCTCTGCA	544			
Qy	452	TGATGACGTGGACCGCTACATTCGGTGGCCACCCCGTGAAGGCTTTGGACTTCCGCA	511			
Db	545	CCATGAGTGTAACCGCTACATTCGGCTCTGCCCATCCGCTCAAGGCCCTTGGATTCCGTA	604			
Qy	512	CACCCCTTGAAGCAAGATCATCAATATCTGCATCTGGCTGTGTCTGTCTATCTGTGGCA	571			
Db	605	CCCCCGAAATGCCAAATTTGTCAATGTCTGCAACTGGATCTCTCTCTGTGCCATCTGTC	664			
Qy	572	TCTCTGCAATAGTCCCTTGGAGGCACCAAGTCAAGGAGACGTCGATGTCATTGAGTGTCT	631			
Db	665	TGCCCGTAATGTTATGCGCAACCAAAATACAGGCAGGGGTC-----CATAGATTGCA	718			
Qy	632	CTTTGCAAGTCCAGATGATGACTACTCTCTGGTGGGACCTCTTTTCATGAAGATCTGGCTCT	691			

Db	719	CCTCAGGTTCTCTCATCCACATGGTACTGGGAGAACCTGCTC--AAATCTGTGTCT	775
Qy	692	TCATCTTTGCTTTGGTATCCCTGTCCTCATCATCATATCGTCTGCTACACCTCATGATCC	751
Db	776	TCATCTTGGCTTCATCATGCCGCTCCTCATCATCATCACTGTGTATTATGGACTGATGATCT	835
Qy	752	TGGCTCTCAAGAGCGTCCGCTCTCTTTCTGGCTCCGAGAGAAAGATCGCAACCTCGTA	811
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Db	896	GGATCACCCGATGGTGTGGTGGTCTGATTTATTGTCTGTCGACCCCATCC	955
Qy	872	ACATATTATCTCTGGTGGAGCTCTGGGAGCACCTCCACAGCAGCTGCTCTCTCCA	931
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Qy	932	GCTATTACTTCTGCATCGCCTTAGGCTATACCAACAGTAGCCTGAATCCCATTTCTACG	991
Db	1016	CCTGGCACTTCTGATTCGCTGGTGGTTAGACAAACAGCTGCCTGAACCCAGTTCTTTATG	1075
Qy	992	CTTCTCTGTATGAAACTTCAACGGGTGTTCCGGACTTCTGCTTCCACTGAAAGATGA	1051
Db	1076	CGTCTCGATGAAACTTCAAACGATGTTTATAGAGATTCTGCATCCCACTTCCTCCA	1135
Qy	1052	GGATGGAGCGGACAGCACTAGCAGAGTCCGAAATACAGTTCAGGATC	1099
Db	1136	CAATCGACAGCAAACTCTGCTCGAATCGTCAAAACACTAGGGAAC	1183
RESULT 74			
LOCUS	AF062753	1423 bp	linear
DEFINITION	Mus musculus mu opioid receptor variant C	mus musculus	rod 10-sep-1999
ACCESSION	AF062753		
VERSION	AF062753.1	GI:5853308	
KEYWORDS			
SOURCE	Mus musculus (house mouse)		
ORGANISM	Mus musculus		
REFERENCE			
AUTHORS	Pan, Y.-X., Xu, J., Bolan, E., Abbadi, C., Chang, A., Zuckerman, A., Ross, G., and Pasternak, G.W.		
TITLE	Identification and characterization of three new alternatively spliced mu-opioid receptor isoforms		
JOURNAL	Mol. Pharmacol. 56 (2), 396-403 (1999)		
MEDLINE	99348417		
PUBMED	10419560		
REFERENCE			
AUTHORS	Pan, Y.-X., Xu, J., Wan, B.-L., Zuckerman, A.B. and Pasternak, G.W.		
TITLE	Direct Submission		
JOURNAL	Submitted (04-MAY-1998) Department of Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021, USA		

FEATURES
SOURCE

CDS

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ORIGIN
Query Match 37.5%; Score 432.4; DB 10; Length 1423;
Best Local Similarity 65.8%; Pred. No. 1.4e-69; Indels 9; Gaps 2;
Matches 663; Conservative 0; Mismatches 336;
QY 92 CCGGTGGGCGGAGCCGACACGACGAGCGCGCTCGGAGGACCGGAGCTGGAGC 151
DB 195 CCGACCCATCGGTCTTAACCGCAGCGGCTTGGCGGAGCACAGCGCTGGCCCTCAGA 244
QY 152 CCGGCGCATCTCCCGCGCATCCCGGTCTATCATCATCGCGGTCTACTCCGTAGTGTG 211
DB 245 CCGGAGCGCTTCCATGTGTACAGCGCATCACCATCATGGCCCTTATTTCTATCGTGTG 304
QY 212 TCGTGGCTTGTGGGCACTCGCTGGTCTATTCGTCATCATCCGATACCAAGATGA 271
DB 305 TAGTGGCTCTTGGAACTTCTGTGTGTATGTATGTATGTATGTATGTATGTATGTAT 364
QY 272 AGACAGCAACCAATTTACATTTATTTAACTGGCTTTGGGAGATGCTTTAGTTACTACA 331
DB 365 AGACTGCCACCAACATCTACATTTTCAACCTTGTCTGGCAGATGCTTTAGCCACTAGCA 424
QY 332 CCATGCCCTTTCAGAGTAGGCTACTTGTATGAATTCCTGGGCTTTTGGGATGTGCTGT 391
DB 425 CGCTGCCCTTTCAGAGTGTATCTTACCTGTATGGGAGCTGGCCCTTTTGGAACTCTCT 484
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QY 452 TGATGAGGTGACCGCTACATGCTGGGTGTCACCGCTGGAGGCTTTGGATTCGCA 511
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QY 512 CACCTTGAAGCAAGATCATCAATATCTGATCTGGGTGCTGTCATCTGTGTGCA 571
DB 605 CCCCCGAAATGCCAAATTTGTCAATGCTGCACTGATCTCTTCTTCTGCAATTTGTC 664
QY 572 TCTTGCATATGCTTGTGAGGACCAAGATGAGGAGACGTCATGTCTATGATGCT 631
DB 665 TGCCCGTAATGTTTATGCGCAACCAAAATACAGGCGGGTCTC-----CATAGATTGCA 718
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DB 719 CCTCAGCTTCTCTATCCCATGTTGCTGCTGAGGACCTGCTC---AAATCTGTCT 775
QY 692 TCATCTTTCCTTGTGATCTCCTGCTCTCATCATCATGCTGTGCTACACCTGATGCC 751
DB 776 TCATCTTTCCTTGTGATCTCCTGCTCTCATCATCATGCTGTGCTGATGATGATCT 835
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DB 1076 CGTTCCTGATGAAACTTCAACAGGATGTTTATAGAGATTTCTGATGCTGCTGCTGCTGCT 1135

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RESULT 75
AF260306 1440 bp mRNA linear ROD 22-NOV-2001
LOCUS Mus musculus mu opioid receptor isoform MOR-1Ha mRNA, complete cds,
DEFINITION alternatively spliced.
ACCESSION AF260306
VERSION AF260306.1 GI:17046162
KEYWORDS Mus musculus (house mouse)
SOURCE Mus musculus
ORGANISM Mus musculus
REFERENCE 1 (bases 1 to 1440)
AUTHORS Pan, Y.-X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and
TITLE Generation of the mu opioid receptor (MOR-1) protein by three new
splice variants of the Oprm gene
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 98 (24), 14084-14089 (2001)
MEDLINE 21574637
PUBMED 11717463
REFERENCE 2 (bases 1 to 1440)
AUTHORS Pan, Y.-X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and
TITLE Direct Submission
JOURNAL Submitted (25-APR-2000) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave, New York, NY 10021, USA
FEATURES
source
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/note="alternatively spliced within exon 1"
/number=1
514. .866
/number=2
867. .1387
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1389. .1440
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ORIGIN
Query Match 37.5%; Score 432.4; DB 10; Length 1440;
Best Local Similarity 65.8%; Pred. No. 1.4e-69; Indels 9; Gaps 2;
Matches 663; Conservative 0; Mismatches 336;
QY 92 CCGGTGGGCGGAGCCGACACGAGCGCGCTCGGAGGACCGGAGCTGGAGC 151
DB 348 CCGACCCATCGGTCTTAACCGCAGCGGCTTGGCGGAGCACAGCGCTGGCCCTCAGA 407
QY 152 CCGGCGCATCTCCCGCGCATCCCGGTCTATCATCATCGCGGTCTACTCCGTAGTGTG 211
DB 408 CCGGAGCGCTTCCATGTGTACAGCCATCACCATCATGCGCCCTCTATCTATCGTGTG 467

588	CGCTGCCCTTTCCAGAGTGTTAACTCCTGATGGGAAGCTGGCCCTTTTGGAAACATCTCTCT	647
392	GCAAGATAGTAATTTCCATTGATTACTACAAATGTTTACCAAGCATCTTCACTTGAACA	451
648	GCAAGATCGTGATCTCAATAGACTACTACAAATGTTTCACTTGAACA	707
452	TCATGAGCGTGAACCGCTACATTGCGGTGTCACCCGCTGAAGCTTTGAGCTTCCGCA	511
708	CCATGAGTGTAGACCGCTACATTGCGGTGTCACCCGCTGAAGCTTTGAGCTTCCGCA	767
512	CACCCCTTGAAGCAAGATCATCAATATCTGCTATCTGGCTGTGCTGTGCTCATCTGTTGGCA	571
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572	TCCTGCAATAGTCTCTTGGAGGACCAAAAGTCAGGAAGACGTGATGTCATTGAGTGT	631
828	TGCGCGTAATGTTTCATGGCAACACAAAATACAGGACGGGTCTCTCTCTCTGCAATGGTC	881
632	CTTTGAGTCTCCAGATGATGACTACTCTCTGTTGGACCTCTTCATGAAGATCTGGCTCT	691
882	CCCTCAGTTTCTCTATCCCAATGTTATGAGAACCTGCTCTCTCTCTCTGCTCTCTCT	938
692	TCATCTTTGCTGCTGATCT	751
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752	TGCGTCTCAAGACGTCGCGCT	811
999	TAGCATCTCAAGATGTCGCGCT	1058
812	GGATCACCAAGATGTCCT	871
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RESULT 77

AF346814

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

AF346814

Mus musculus mu opioid receptor variant R (Oprm) mRNA, complete cds, alternatively spliced.

AF346814

AF346814.1

GI:27448126

Mus musculus (house mouse)

Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 1500)

Pan, Y.-X., Xu, J. and Pasternak, G.

Identification and characterization of four splice variants of mouse mu opioid receptor gene

Unpublished

2 (bases 1 to 1500)

Pan, Y.-X., Xu, J. and Pasternak, G.

Direct Submission

Submitted (08-FEB-2001) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA

JOURNAL


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Db 401 CCGACCCATCGCGTCTTAACCGCACCGGGCTTGGGGGAGCCACAGCCTGTGCCCTCAGA 460
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Qy 392 GGAAGATAGTAACTTCCATTTACTACAAATGTTTACCAAGATCTTCCCTTGACCA 451
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RESULT 82
MMU26915
LOCUS
DEFINITION
U26915
ACCESSION
VERSION

MMU26915 1610 bp mRNA linear ROD 09-NOV-1995
Mus musculus mu opioid receptor (MOR-1) mRNA, complete cds.

KEYWORDS
SOURCE
ORGANISM

Mus musculus (house mouse)

Mus musculus

Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 1610)

Rossi,G.C., Pan,Y.X., Brown,G.P. and Pasternak,G.W.

Antisense mapping the MOR-1 opioid receptor: evidence for
alternative splicing and a novel morphine-6 beta-glucuronide
receptor

FEBS Lett. 369 (2-3), 192-196 (1995)

JOURNAL

MEDLINE

PUBMED

7649256

2 (bases 1 to 1610)

REFERENCE

AUTHORS

TITLE

JOURNAL

Submitted (11-MAY-1995)

Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021,

USA

FEATURES
source

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ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 1610;

Best Local Similarity 65.8%; Pred. No. 1.4e-69;

Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

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Qy 92 CCGCTGGCGGAGCCCGACAGCAACGGCAGCGCGCTCGGAGGAGCGCAGCTGGAGC 151
Db 401 CCGACCCATCGGTCTTAACCGCACCGGGCTTGGGGGAGCCACAGCCTGTGCCCTCAGA 460
Qy 152 CCGCGCACATCTCCCGGCCATCCCGGTCTATCATCGGGCGGTCTACTCCGTAGTGTG 211
Db 461 CCGGACGCCCTTCCATGGTTCACAGCCATCACCATCATGGCCCTCTATTCTATCGTGTG 520
Qy 212 TCGTGGGCTTGTGGGCAACTCGCTGTCTATGTTGCTGATCATCGGATACCAAGATGA 271
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Db 701 GCAAGATCGTATCTCAATAGACTACTACAACTGTTTCCACAGTATCTTCCACCTCTGCA 760
Qy 452 TGATGAGCTGGACCGCTACATTCGCTGTGTGCCACCCCGTGAAGGCTTTGACCTTCGCA 511
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 Db 1473 CAATCGACAGCAAACTCTGCTCAATCCGTCGAAACACACAGGAGAC 1520

RESULT 85

AY036621

LOCUS

DEFINITION Mus musculus mu opioid receptor variant MOR-1R (Oprm) mRNA, complete cds, alternatively spliced.

ACCESSION AY036621

VERSION

KEYWORDS

SOURCE

ORGANISM

MUS MUSCULUS

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 1695)

Pan, Y., Xu, J., Xu, M. and Pasternak, G.W.

Identification and characterization of a novel splice variant from mouse mu opioid receptor gene (Oprm)

Unpublished

2 (bases 1 to 1695)

Pan, Y., Xu, J., Xu, M. and Pasternak, G.W.

Direct Submission

Submitted (26-MAY-2001) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA

Location/Qualifiers

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67..1437

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ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 1695;

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QY 152 CCGGCGCATCTCCCGGCCCATCCGGTCAATCATCAGGGGGTCTACTCCGCTAGTGTTCG 211

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RESULT 86

AR269392

LOCUS

DEFINITION Sequence 9 from patent US 6500927.

ACCESSION AR269392

VERSION

KEYWORDS

SOURCE

ORGANISM

Unclassified.

1 (bases 1 to 1729)

Pasternak, G. and Pan, Y.-X.

Identification and characterization of multiple splice variants of

Db	1076	CGTTCCTGGATGAAAACTTCAAACGATGTTTTAGAGATTTCGCATCCCACTTCCTCCA	1135
Qy	1052	GGATGGAGGGCAGACGACCTAGCAGAGTCCGAAATACAGTTCAAGGATC	1099
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RESULT 87	AF167568				

ACCESSION AF167568
VERSION AF167568.1 GI:8778197
KEYWORDS Mus musculus (house mouse)
SOURCE

ORGANISM	REFERENCE
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Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.	

AUTHORS
FALL, I.A.; XU, B.; BOTAN, E.; CHANG, A.; HANAUER, D.; ROSE, T.
Pasternak, G.W.

JOURNAL OF CELLULAR PHYSIOLOGY 166:337-340 (1995)

REFERENCE 2 (bases 1 to 172)
PUBMED 10682855
MEDLINE 20173000

AUTHORS Fan, L.-X., Xu, J., Chang, R., Mandrekar, J.L., and Abramson, J.S.
TITLE Direct Substitution
JOURNAL Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021, USA
Submitted (13-JUN-2000)

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ORIGIN

Query Match	37.5%	Score 432.4;	DB 10;	Length 1729;
Best Local Similarity	55.8%	Pred. No. 1.4e-69;		
Matches 663;	Conservative	0;	Mismatches 336;	Indels 9;
Gaps	2			

92 CCGGCTGGGCCCGAGCCCGACAGCAACGGCAGCGCCGGCTCGGAGGACGCCGACGTGGAGC 151

D_b 185 CCGACCCATGCGGTCTTAACCGACGGGGCTTGCGGGGAGCCACAGCTGTGCGCTCAGA 241

212 TCGTGGGCTTGGTGGGCAACTCGGTGGTCATGTTGGTGATCATCCGATACACAAGATCA 271

Db 305 TAGTGGGCTCTTTGGAACTTCCTGGTCATGTATGTGATTGTAAGATATACCAAAATGA 364

272 AGACGACCAACCAATTTACATATTAACTTGGCTTTGGCAGATGCTTTAGTTACTACAA 331
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DEFINITION Sequence 10 from patent US 6500927.
ACCESSION AR269393
VERSION AR269393.1 GI:29700554
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 2045)
AUTHORS Pasternak, G. and Pan, Y.-X.
TITLE Identification and characterization of multiple splice variants of the mu-opioid receptor gene
JOURNAL Patent: US 6500927-A 10 31-DEC-2002;
FEATURES Location/Qualifiers

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Query Match 37.5%; Score 432.4; DB 6; Length 2045;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
Qy 92 CCGCTGGGCGGAGCCGACAGCAACGGCAGCCGCTCGGAGGACGGCAGCTGGAGC 151
Db 185 CCGACCCANCGGTCTTAACCCGACGCGGCTTGGCGGAGCCACAGCCTGTGCCCTCAGA 244
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Qy 1052 GGATGGAGCGGAGAGCACTAGCAGAGTCCGAAATACAGATTTCAGGATC 1099
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DEFINITION AF167567
ACCESSION AF167567
VERSION AF167567.1 GI:18026694
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 2045)
AUTHORS Pan, Y.-X., Xu, J., Chang, A. and Pasternak, G.W.
TITLE Identification and characterization of a novel mu opioid receptor
splice variant (MOR-1BII)
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 2045)
AUTHORS Pan, Y.-X., Xu, J., Chang, A. and Pasternak, G.W.
TITLE Direct Submission
JOURNAL Submitted (12-JUL-1999) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave., New York, NY 10021, USA
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ORIGIN
Query Match 37.5%; Score 432.4; DB 10; Length 2045;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

Qy 92 CCGGCTGGGCGGAGCCGACAGCAACGCGAGCGCGGCTCGGAGGACGGCGAGCTGGAGC 151
Db 185 CCGACCATCGGTCTTAACCGACGGGGCTTGGCGGAGCCACAGCGTGTGCCCTCAGA 244
Qy 152 CCGCGCACATCTCCCGCGCATCCCGGTATCATACGCGGGTCTACTCGGTAGTGTTCG 211
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RESULT 90
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 ACCESSION AB047546
 VERSION AB047546.1 GI:15277133
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 SOURCE Mus musculus
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1
 AUTHORS Ikeda, K., Kobayashi, T., Ichikawa, T., Kumanishi, T., Niki, H. and
 Yano, R.
 TITLE The untranslated region of m-opioid-receptor mRNA contributes to
 reduced opioid sensitivity in OXB mice
 JOURNAL J. Neurosci. (2000) In press
 REFERENCE 2 (bases 1 to 2137)
 AUTHORS Ikeda, K.
 TITLE Direct Submission
 JOURNAL Submitted (21-AUG-2000) Kazutaka Ikeda, RIKEN Brain Science
 Institute, Neurobiology of Emotion Laboratory, 2-1 Hiroseawa, Wako,

Saitama 351-0198, Japan (E-mail: ikedak@postman.riken.go.jp,
Tel: 81-48-462-1111 (ex. 6436), Fax: 81-48-467-9645)

FEATURES

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ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 2137;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
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RESULT 91

AX280923

LOCUS

Sequence 546 from Patent WO0177172. 1182 bp DNA linear PAT 02-NOV-2001

ACCESSION

AX280923

VERSION

AX280923.1

KEYWORDS

SOURCE

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

1

Lehmann-Bruinema, K., Liaw, C.W. and Lin, I.-L.

Non-endogenous, constitutively activated known g protein-coupled

receptors

Patent: WO 0177172-A 546 18-OCT-2001;

Arena Pharmaceuticals, Inc. (US)

JOURNAL

Location/Qualifiers

FEATURES

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ORIGIN

Query Match

Best Local Similarity

Matches 658; Conservative

37.4%; Score 431.6; DB 6; Length 1182;

66.1%; Pred. No. 1.9e-69;

Mismatches 329; Indels 9; Gaps 2;

QY 92 CCGGCTGGCCGAGCCGACAGCAGCGCGCTCGGAGGACGCGAGCTGGAGC 151

DB 125 CCGACCCATCGGTCCGAAACCGCAACCTGGGGGGAGAGACAGCCTGTGCCCCCGA 184

QY 152 CCGCGCAGATCTCCCGGGCCATCCCGGTTCATCATCACGCGGTCTACTCCGAGTGTG 211

DB 185 CCGGCGAGTCCCTCCATGATACGCGCATCAGATCATGGCCCTCTACTCCATCGTGTG 244

QY 212 TCGTGGGCTTGGTGGGCAACTCGTGGTTCATGTTTCGTGATCATCCGATACCAAGATGA 271

DB 245 TGGTGGGCTCTTCGAAACCTTCCTGGTTCATGATGATGATGATGATGATGATGATG 304

QY 272 AGACAGCAACCAATTTACATTTTAACTGGCTTTGGGAGATGCTTTAGTTACTACAA 331

DB 305 AGACTGCCCAACCACTACATTTTCAACCTTGTCTGGCAGATGCTTTAGTCCACCACTA 364

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ACCESSION AX280921
VERSION AX280921.1 GI:16608216
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Lehmann-Bruinsma, K., Liaw, C.W. and Lin, I.B.
TITLE Non-endogenous, constitutively activated known g protein-coupled
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JOURNAL Patent: WO 0177172-A 544 18-OCT-2001;
Arena Pharmaceuticals, Inc. (US)
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Best Local Similarity 66.1%; Pred. No. 1.9e-69;
Matches 658; Conservative 0; Mismatches 329; Indels 9; Gaps 2;
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DEFINITION Macaca fascicularis mu-opioid receptor mRNA, complete cds.
ACCESSION AY038989
VERSION AY038989.1 GI:14718771
KEYWORDS
SOURCE
ORGANISM
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Macaca fascicularis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
Cercopithecinae; Macaca.
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Miller, G.M. and Madras, B.K.
Cloning of the Macaca fascicularis mu opioid receptor
Unpublished
2 (bases 1 to 1399)
Miller, G.M. and Madras, B.K.
Direct Submission
Submitted (07-JUN-2001) Neurochemistry, New England Primate
Research Center, Harvard Medical School, One Pine Hill Drive,
Southborough, MA 01772, USA
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Query Match 37.4%; Score 431.6; DB 9; Length 1399;
Best Local Similarity 66.1%; Pred. No. 1.9e-69;
Matches 659; Conservative 0; Mismatches 329; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGGAGCCGAGCAGAACGGCAGCCGGCTCGGAGGACGCGACGCTGGAGC 151
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ORIGIN

Query Match 37.3%; Score 430.8; DB 6; Length 2229;
Best Local Similarity 65.7%; Pred. No. 2.7e-69;
Matches 662; Conservative 0; Mismatches 337; Indels 9; Gaps 2;

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DEFINITION

AR409587

ACCESSION

AR409587.1

VERSION

GI:40160560

KEYWORDS

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SOURCE

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ORGANISM

Unclassified.

REFERENCE

1 (bases 1 to 2229)

AUTHORS

Kieffer, B., Matthes, H. W. D., Simonin, P. H., Dierich, A. and Lemer, M.

TITLE

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JOURNAL

modified

FEATURES

Patent: US 6632977-A 1 14-OCT-2003;

ORIGIN

Location/Qualifiers

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Query Match 37.3%; Score 430.8; DB 6; Length 2229;

Best Local Similarity 65.7%; Pred. No. 2.7e-69;

Matches 662; Conservative 0; Mismatches 337; Indels 9; Gaps 2;

QY 92 CCGGCTGGGCGGAGCCGACAGCAACGGAGCGCCGGCTCGAGGAGCGCGAGCTGGAGC 151

DB 374 CCGACCCATCGGCTCTAACCGCACGGGGCTTGGCGGAGCCACAGCCTGTGCCCTCAGA 433

QY 152 CCGGCGACATCTCCCGGCGATCCCGGTGATCATACAGGGGGTCTACTCCGTAGTGTGG 211

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- 26: em_gss_pbg.*
- 27: em_gss_vrl.*
- 28: gb_gss1.*
- 29: gb_gss2.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	805.2	69.8	895	14	CB565888
2	470.6	40.8	837	14	CF593603
3	468	40.6	480	13	EX092912
4	430.8	37.3	2405	11	AK038389

5	420	36.4	4022	11	AK043873
6	367.8	31.9	2919	11	AK038620
7	367.8	31.9	2959	11	AK079529
8	352	30.5	879	29	AY410745
9	335.6	29.1	2340	11	AK044178
10	327.4	28.4	2974	11	AK043275
11	327	28.3	3101	11	AK031926
12	325.8	28.2	879	29	AY410747
13	311.4	27.0	1053	29	CNS04C2T
14	277.6	24.1	783	13	EX874804
15	271.4	23.5	888	10	BF676176
16	268.6	23.3	917	13	BU219878
17	239.8	20.8	657	10	BS588668
18	231.2	20.0	682	29	AY410746
19	229.6	19.9	1176	29	AY400827
20	227.4	19.7	389	10	BS649947
21	226.6	19.6	1176	29	AY400829
22	226.6	19.6	2014	11	AK046464
23	224.6	19.5	980	12	BM543468
24	223	19.3	632	10	BB641725
25	221.4	19.2	1006	29	AY400676
26	217.6	18.9	784	13	BQ179053
27	214.8	18.6	1006	29	AY400674
28	214	18.5	429	12	BM342951
29	213.8	18.5	2432	11	AK051189
30	213	18.5	836	29	CNS02261
31	213	18.5	866	14	CD246184
32	211	18.3	531	29	CES17843
33	208.6	18.1	877	29	CNS028C2
34	208.2	18.0	842	29	CNS028KU
35	207.8	18.0	697	13	BU139251
36	207.8	18.0	757	13	BU514716
37	203.4	17.6	785	12	BI754749
38	202.8	17.6	810	12	BM943972
39	199.2	17.3	649	13	BU219037
40	195.6	16.9	816	13	BQ179148
41	194	16.8	787	29	BM228633
42	192.8	16.7	746	13	BQ571737
43	190.6	16.5	954	29	AY410421
44	189.8	16.4	546	28	AZ226406
45	182.2	15.8	2848	11	AK039151
46	181.8	15.8	318	29	CG536117
47	181.2	15.7	776	14	CF550026
48	180.4	15.5	1176	29	AY400828
49	179.2	15.5	735	13	BU366266
50	178.8	15.5	987	29	AY401571
51	178.8	15.5	2724	11	EC033145
52	178.4	15.5	433	10	AW489031
53	178.4	15.5	741	13	BU613017
54	177.8	15.4	720	12	BI753905
55	176	15.3	828	13	EX843850
56	171.6	14.9	1307	11	CNSL11BD
57	170.2	14.7	654	10	AW373832
58	170.2	14.7	990	29	AY401573
59	169	14.6	1095	29	AY400986
60	168.4	14.6	627	12	BI919235
61	168.2	14.6	183	14	R81583
62	166.4	14.4	710	29	CNS01ZMG
63	165	14.3	945	29	AY410423
64	164	14.2	502	13	EX280512
65	162.2	14.1	1257	29	AY400332
66	162	14.0	798	14	CD559493
67	161.4	14.0	1089	29	AY400988
68	160	13.9	714	10	BB631900
69	159.4	13.8	550	10	BF193020
70	159.4	13.8	987	29	AY401572
71	159.2	13.8	768	13	BU318522
72	158.8	13.7	795	14	CD559491
73	158.4	13.7	910	29	AY410422
74	156.2	13.5	1287	29	AY400334
75	156	13.5	701	14	CF147827
76	155.4	13.5	688	13	BU057593
77	153.4	13.3	916	13	EX433241

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OM nucleic - nucleic search, using sw model

Run on: August 31, 2004, 02:26:37 ; Search time 602 Seconds
(without alignments)
9434.096 Million cell updates/sec

Title: US-09-904-584-1

Perfect score: 1154

Sequence: 1 atggactcccgatccagat.....ccagtagtactagctgtgga 1154

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 332720 seqs, 2460713050 residues

Total number of hits satisfying chosen parameters: 6474540

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 500 summaries

Database : Published Applications NA:

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- 16: /cgm2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	1152.4	99.9	1154	12	US-09-904-584-4
5	1152.4	99.9	1154	12	US-09-904-584-5
6	1152.4	99.9	1154	12	US-09-904-584-6
7	1152.4	99.9	1154	12	US-09-904-584-7
8	1146	99.3	1182	15	US-10-225-567A-147
9	1146	99.3	1182	15	US-10-345-680-19
10	1146	99.3	1182	16	US-10-305-720-1417
11	1146	99.3	1182	17	US-10-283-975A-80
12	1143	99.0	1143	15	US-10-318-661-1
13	1137.8	98.6	1284	15	US-10-318-661-3
14	1135	98.4	1143	15	US-10-345-680-21

15	1131.8	98.1	1143	11	US-09-826-509-542	Sequence 542, Appl
16	1001	86.7	1275	15	US-10-318-661-5	Sequence 5, Appl
17	996.2	86.3	1275	15	US-10-318-661-7	Sequence 7, Appl
18	981	85.0	1875	15	US-10-318-661-13	Sequence 13, Appl
19	965	83.6	1875	15	US-10-318-661-15	Sequence 15, Appl
20	910.8	78.9	1408	9	US-09-214-904-5	Sequence 5, Appl
21	879.4	76.2	1911	15	US-10-318-661-17	Sequence 17, Appl
22	870.6	40.8	585	13	US-10-027-632-188121	Sequence 188121
C 22	470.6	40.8	585	13	US-10-027-632-188122	Sequence 188122
C 23	470.6	40.8	585	16	US-10-027-632-188121	Sequence 188121
C 24	470.6	40.8	585	16	US-10-027-632-188122	Sequence 188122
C 25	470.6	40.8	585	16	US-10-027-632-188122	Sequence 188122
26	446.4	38.7	1618	10	US-09-841-720-1	Sequence 1, Appl
27	446.4	38.7	1618	10	US-09-841-720-3	Sequence 3, Appl
28	436.2	37.8	1464	15	US-10-185-083-25	Sequence 25, Appl
29	436.2	37.8	1464	15	US-10-194-595-25	Sequence 25, Appl
30	434.8	37.7	1239	15	US-10-080-917-10	Sequence 10, Appl
31	434.8	37.7	1239	15	US-10-080-917-10	Sequence 8, Appl
32	434.8	37.7	1245	15	US-10-185-083-26	Sequence 26, Appl
33	434.8	37.7	1388	15	US-10-194-595-26	Sequence 26, Appl
34	434.8	37.7	1431	15	US-10-080-917-6	Sequence 6, Appl
35	434.8	37.7	2149	15	US-10-080-917-12	Sequence 12, Appl
36	434.8	37.7	2162	15	US-10-225-567A-185	Sequence 185, Appl
37	434.8	37.7	2162	16	US-10-305-720-1379	Sequence 1379, Appl
38	433.2	37.5	1176	10	US-09-935-061-11	Sequence 11, Appl
39	433.2	37.5	1176	17	US-10-692-071-11	Sequence 11, Appl
40	433.2	37.5	1473	15	US-10-080-917-13	Sequence 13, Appl
41	432.6	37.5	2951	15	US-10-185-083-21	Sequence 21, Appl
42	432.6	37.5	2951	15	US-10-194-595-21	Sequence 21, Appl
43	432.4	37.5	1332	15	US-10-185-083-22	Sequence 22, Appl
44	432.4	37.5	1332	15	US-10-194-595-22	Sequence 22, Appl
45	432.4	37.5	1334	9	US-09-761-962-3	Sequence 3, Appl
46	432.4	37.5	1334	15	US-10-283-300-3	Sequence 3, Appl
47	432.4	37.5	1365	9	US-09-761-962-11	Sequence 11, Appl
48	432.4	37.5	1365	15	US-10-283-300-11	Sequence 11, Appl
49	432.4	37.5	1373	15	US-10-185-083-51	Sequence 51, Appl
50	432.4	37.5	1373	15	US-10-194-595-51	Sequence 51, Appl
51	432.4	37.5	1423	9	US-09-761-962-1	Sequence 1, Appl
52	432.4	37.5	1423	15	US-10-283-300-1	Sequence 1, Appl
53	432.4	37.5	1440	15	US-10-185-083-15	Sequence 15, Appl
54	432.4	37.5	1440	15	US-10-194-595-15	Sequence 15, Appl
55	432.4	37.5	1569	15	US-10-185-083-17	Sequence 17, Appl
56	432.4	37.5	1569	15	US-10-194-595-17	Sequence 17, Appl
57	432.4	37.5	1610	9	US-09-761-962-16	Sequence 16, Appl
58	432.4	37.5	1610	15	US-10-283-300-16	Sequence 16, Appl
59	432.4	37.5	1614	15	US-10-185-083-16	Sequence 16, Appl
60	432.4	37.5	1695	15	US-10-194-595-16	Sequence 16, Appl
61	432.4	37.5	1695	15	US-10-185-083-24	Sequence 24, Appl
62	432.4	37.5	1695	15	US-10-194-595-24	Sequence 24, Appl
63	432.4	37.5	1729	9	US-09-761-962-9	Sequence 9, Appl
64	432.4	37.5	1729	15	US-10-283-300-9	Sequence 9, Appl
65	432.4	37.5	2045	9	US-09-761-962-10	Sequence 10, Appl
66	432.4	37.5	2045	15	US-10-283-300-10	Sequence 10, Appl
67	432.4	37.5	2588	15	US-10-185-083-23	Sequence 23, Appl
68	432.4	37.5	2588	15	US-10-194-595-23	Sequence 23, Appl
69	431.6	37.4	1182	11	US-09-826-509-546	Sequence 546, Appl
70	431.6	37.4	1203	11	US-09-826-509-544	Sequence 544, Appl
71	430.8	37.3	2229	9	US-09-214-904-1	Sequence 1, Appl
72	430.4	37.3	1149	9	US-09-993-844-10	Sequence 10, Appl
73	429.2	37.2	1542	9	US-09-761-962-4	Sequence 4, Appl
74	429.2	37.2	1542	15	US-10-283-300-4	Sequence 4, Appl
75	429.2	37.2	1981	9	US-09-823-114-15	Sequence 15, Appl
76	429.2	37.2	1981	15	US-10-290-748-15	Sequence 15, Appl
77	422.6	36.6	1829	9	US-09-823-114-7	Sequence 7, Appl
78	422.6	36.6	1829	15	US-10-290-748-7	Sequence 7, Appl
79	422.6	36.6	2218	9	US-09-214-904-3	Sequence 3, Appl
80	422.6	36.6	2219	15	US-10-112-599A-1	Sequence 1, Appl
81	422.6	36.6	2219	17	US-10-435-655-1	Sequence 1, Appl
82	415.6	36.0	1176	10	US-09-935-061-13	Sequence 13, Appl
83	415.6	36.0	1176	17	US-10-692-071-13	Sequence 13, Appl
84	411	35.6	1346	9	US-09-761-962-12	Sequence 12, Appl
85	411	35.6	1346	15	US-10-283-300-12	Sequence 12, Appl
86	408.6	35.4	1773	15	US-10-112-599A-3	Sequence 3, Appl
87	408.6	35.4	1773	15	US-10-225-567A-107	Sequence 107, Appl

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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 528 Seconds

(without alignments)
9284.887 Million cell updates/sec

Title: US-09-904-584-1
Perfect score: 1154
Sequence: 1 agggactcccgatccagat.....ccagtgactagctgctgga 1154

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 500 summaries

Database :

1: Genesegm29Jan04:*
2: Genesegm1980s:*
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4: Genesegm2000s:*
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6: Genesegm2001bs:*
7: Genesegm2002s:*
8: Genesegm2003as:*
9: Genesegm2003bs:*
10: Genesegm2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1146	99.3	1182	7	ACA56819 Human sig
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3	1146	99.3	1182	9	AAD59490 Human kap
4	1146	99.3	1182	9	AD84861 Farnesyl
5	1143	99.0	1143	2	AAT90998 Human kap
6	1142	99.0	1142	2	AAT12550 Human kap
7	1137.8	98.6	1284	2	AAT90999 Human kap
8	1131.8	98.1	1143	5	AB198011 Human kap
9	1001	86.7	1275	2	AAT92601 Human kap
10	910.8	78.9	1408	2	AAV49254 Mouse kap
11	910.8	78.9	1410	2	AAV75926 Human kap
12	910.8	78.9	2481	2	AAQ86725 Mammalian
13	869.6	75.4	1000	2	AAQ75931 Human kap
14	448	38.8	2135	5	AAF85416 Nucleotid
15	446.4	38.7	1618	2	AAQ89222 Rat mu op
16	446.4	38.7	1618	2	AAQ89223 Transcrip
17	446.4	38.7	1618	3	AAAS9499 cDNA enco
18	443.4	38.4	2070	2	AAQ79199 Rat mu-su
19	436.4	37.8	2162	2	AAV61394 Human mu-
20	434.8	37.7	1239	6	ABS54814 cDNA enco
21	434.8	37.7	1245	6	ABS54813 cDNA enco
22	434.8	37.7	1431	6	ABS54812 cDNA enco
23	434.8	37.7	1610	2	AAQ89226 Human mu

24	434.8	37.7	1610	3	AAA59503	CDNA enco
25	434.8	37.7	2149	6	ABS54815	CDNA enco
26	434.8	37.7	2160	2	AAQ93102	Human mu
27	434.8	37.7	2162	2	AAV61995	Human mu-
28	434.8	37.7	2162	2	AAV61986	Human mu-
29	434.8	37.7	2162	2	AAV61988	Human mu-
30	434.8	37.7	2162	2	AAV61984	Human mu-
31	434.8	37.7	2162	2	AAV61987	Human mu-
32	434.8	37.7	2162	2	AAV61990	Human mu-
33	434.8	37.7	2162	2	AAV61985	Human mu-
34	434.8	37.7	2162	2	AAV61989	Human mu-
35	434.8	37.7	2162	3	AAZ88470	Human mu
36	434.8	37.7	2162	6	ABK14953	Human mu
37	434.8	37.7	2162	7	ACA56781	Human opi
38	434.8	37.7	2162	7	ABZ42697	Human cpi
39	434.8	37.7	2162	9	ADC21534	Human DNA
40	434.8	37.7	2162	7	AAZ51226	Human REM
41	433.2	37.5	1176	7	AAZ50855	Human mu
42	433.2	37.5	1473	6	ABS54816	CDNA enco
43	433.2	37.5	2162	2	AAV61991	Human mu-
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49	432.4	37.5	1423	3	AAZ60726	CDNA enco
50	432.4	37.5	1610	3	AAZ60741	CDNA enco
51	432.4	37.5	1729	3	AAZ60734	CDNA enco
52	431.6	37.4	1182	5	AB198013	Non-endog
53	431.6	37.4	1203	5	AB198012	Non-endog
54	430.8	37.3	2045	3	AAZ60735	CDNA enco
55	430.8	37.3	2229	2	AAV49252	Mouse mu
56	430.4	37.3	1149	6	ABX13057	Human MOR
57	429.2	37.2	1542	3	AAZ60729	CDNA enco
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59	429.2	37.2	1981	6	ABS53445	DNA seque
60	427.6	37.1	1981	2	AAQ56705	Partial s
61	422.6	36.6	1821	2	AAQ56700	Sequence
62	422.6	36.6	1829	5	AAZ11035	Murine de
63	422.6	36.6	1829	5	ABS53439	CDNA enco
64	422.6	36.6	2218	2	AAV49253	Mouse del
65	422.6	36.6	2219	7	ABV75085	Murine de
66	422.6	36.6	2272	2	AAQ75927	Mouse del
67	415.6	36.0	1176	7	AAZ50856	Human mod
68	415.6	36.0	2216	2	AAQ66656	Murine de
69	408.6	35.4	1773	7	ACA56807	Human sig
70	408.6	35.4	1773	7	ABT34217	Human del
71	408.6	35.4	1773	7	ABV75086	Human del
72	408.6	35.4	1773	7	ABZ42658	Human opi
73	407	35.3	1119	5	AB198009	Non-endog
74	402.2	34.9	1197	7	AAZ50857	Human mod
75	395	34.2	1829	7	ABX94262	Human orp
76	393.4	34.1	1805	6	ABS53446	CDNA enco
77	393.4	34.1	1829	7	ABX94264	Human orp
78	393.4	34.1	1829	7	ABX94263	Human orp
79	393.4	34.1	1973	7	ACA56793	Human sig
80	393.4	34.1	1973	9	ADC40517	DNA deriv
81	393.4	34.1	2534	7	ABX94045	CDNA enco
82	393.4	34.1	2534	7	ABZ42709	Human opi
83	391.8	34.0	1113	5	AB198010	Non-endog
84	391.8	34.0	1829	7	ABX94260	Human orp
85	387.6	33.6	1238	3	AAZ60727	CDNA enco
86	387.6	33.6	1257	3	AAZ60730	CDNA enco
87	384	33.3	1870	6	ABS54825	DNA enco
88	377.6	32.7	1243	7	ABX94042	Rat orpha
89	377.6	32.7	1387	7	ABX94039	Rat orpha
90	377.6	32.7	1567	3	AAQ89233	Rat opio1
91	377.6	32.7	1567	3	AAA59510	CDNA enco
92	376	32.6	2706	6	AAQ92972	Rat opior
93	375.6	32.5	945	6	ABS54811	cDNA enco
94	368	31.9	1452	2	AAZ90381	Rat metha
95	368	31.9	1452	2	AAZ89585	Rat orpha
96	368	31.9	1452	2	AAV56017	Rat metha

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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 103 Seconds
(without alignments)
6217.605 Million cell updates/sec

Title: US-09-904-584-1

Perfect score: 1154

Sequence: 1 atggactcccgatccagat.....ccagatgactagctgtgga 1154

Scoring table: IDENTITY_NUC

Gapop 10_0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 500 summaries

Database :

Issued Patents NA.*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq.*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq.*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq.*
5: /cgn2_6/ptodata/2/ina/PTUS_COMB.seq.*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result NO.	Score	Query Match	Length	DB ID	Description
1	1146	99.3	1182	4	US-09-016-434-1417
2	1143	99.0	1143	4	US-09-341-446B-1
3	1142	99.0	1142	3	US-08-765-743-1
4	1137.8	98.6	1284	4	US-09-341-446B-3
5	1001	86.7	1275	4	US-09-341-446B-5
6	996.2	86.3	1275	4	US-09-341-446B-7
7	910.8	78.9	1408	4	US-09-214-904-5
8	910.8	78.9	1410	3	US-08-147-592A-1
9	910.8	78.9	1410	4	US-08-292-694A-1
10	871.2	75.5	1000	3	US-08-147-592A-11
11	871.2	75.5	1000	4	US-08-292-694A-11
12	448	38.8	2135	3	US-08-430-286A-1
13	446.4	38.7	1618	3	US-08-889-108-1
14	446.4	38.7	1618	3	US-08-889-108-3
15	446.4	38.7	1618	3	US-08-120-601B-1
16	446.4	38.7	1618	3	US-08-120-601B-3
17	446.4	38.7	1618	5	PCT-US94-10358-1
18	446.4	38.7	1618	5	PCT-US94-10358-3
19	434.8	37.7	1610	3	US-08-889-108-7
20	434.8	37.7	1610	5	PCT-US94-10358-7
21	434.8	37.7	2160	3	US-08-188-275A-1
22	434.8	37.7	2162	4	US-09-351-198-1
23	434.8	37.7	2162	4	US-09-113-426-1
24	434.8	37.7	2162	4	US-09-016-434-1379
25	434.8	37.7	2162	4	US-09-355-709C-7
26	432.4	37.5	1334	4	US-09-761-962A-3
27	432.4	37.5	1365	4	US-09-761-962A-11

28	432.4	37.5	1423	4	US-09-761-962A-1	Sequence 1, Appli
29	432.4	37.5	1610	4	US-09-761-962A-16	Sequence 16, Appli
30	432.4	37.5	1729	4	US-09-761-962A-9	Sequence 9, Appli
31	432.4	37.5	2045	4	US-09-761-962A-10	Sequence 10, Appli
32	430.8	37.3	2229	4	US-09-214-904-1	Sequence 4, Appli
33	429.2	37.2	1542	4	US-09-761-962A-4	Sequence 15, Appli
34	429.2	37.2	1981	3	US-08-387-707-15	Sequence 15, Appli
35	429.2	37.2	1981	4	US-08-405-271A-15	Sequence 15, Appli
36	422.6	36.6	1829	2	US-08-411-859-1	Sequence 1, Appli
37	422.6	36.6	1829	3	US-08-387-707-7	Sequence 7, Appli
38	422.6	36.6	1829	4	US-08-405-271A-7	Sequence 7, Appli
39	422.6	36.6	2218	4	US-09-214-904-3	Sequence 3, Appli
40	422.6	36.6	2219	4	US-08-432-174A-1	Sequence 1, Appli
41	422.6	36.6	2272	3	US-08-147-592A-3	Sequence 3, Appli
42	422.6	36.6	2272	4	US-08-292-694A-3	Sequence 3, Appli
43	411	35.6	1346	4	US-09-761-962A-12	Sequence 12, Appli
44	408.5	35.4	1773	4	US-09-016-434-1405	Sequence 1405, Ap
45	399	34.6	1998	4	US-08-432-174A-3	Sequence 3, Appli
46	393.4	34.1	1805	4	US-08-405-271A-18	Sequence 18, Appli
47	393.4	34.1	1973	4	US-09-016-434-1391	Sequence 1391, Ap
48	393.4	34.1	1973	4	US-09-023-655-1417	Sequence 1417, Ap
49	393.4	34.1	3205	4	US-09-976-594-171	Sequence 171, App
50	387.6	33.6	1238	4	US-09-761-962A-2	Sequence 2, Appli
51	387.6	33.6	1257	4	US-09-761-962A-5	Sequence 5, Appli
52	377.6	32.7	1567	3	US-08-889-108-16	Sequence 16, Appli
53	377.6	32.7	1567	5	PCT-US94-10358-16	Sequence 16, Appli
54	377.6	32.7	2706	2	US-08-454-549-1	Sequence 1, Appli
55	377.6	32.7	2706	3	US-08-454-552-1	Sequence 1, Appli
56	372.8	32.3	2706	3	US-08-676-351-1	Sequence 1, Appli
57	368	31.9	1452	1	US-08-149-093A-3	Sequence 3, Appli
58	368	31.9	1452	1	US-08-911-245-3	Sequence 3, Appli
59	368	31.9	1452	1	US-08-553-058C-3	Sequence 3, Appli
60	368	31.9	1452	2	US-08-514-451A-3	Sequence 3, Appli
61	368	31.9	1452	3	US-09-170-331-3	Sequence 3, Appli
62	368	31.9	1452	3	US-09-510-473-3	Sequence 3, Appli
63	368	31.9	1452	4	US-09-048-916B-3	Sequence 3, Appli
64	367.8	31.9	1134	4	US-09-743-871B-14	Sequence 14, Appli
65	367.8	31.9	1330	3	US-08-147-592A-5	Sequence 5, Appli
66	367.8	31.9	1330	4	US-08-292-694A-5	Sequence 5, Appli
67	367.8	31.9	2600	4	US-08-386-209A-1	Sequence 1, Appli
68	357	30.9	1177	4	US-09-743-871B-13	Sequence 13, Appli
69	344.8	29.9	2600	1	US-08-147-594A-1	Sequence 1, Appli
70	336.2	29.1	1223	4	US-09-743-871B-11	Sequence 11, Appli
71	336.2	29.1	1283	4	US-09-743-871B-12	Sequence 12, Appli
72	337.4	28.4	2634	4	US-09-743-871B-8	Sequence 8, Appli
73	327	28.3	1256	4	US-09-743-871B-9	Sequence 9, Appli
74	319.6	27.7	830	3	US-08-387-707-13	Sequence 13, Appli
75	319.6	27.7	830	4	US-08-405-271A-13	Sequence 13, Appli
76	243	21.1	2447	3	US-08-387-707-12	Sequence 12, Appli
77	243	21.1	2447	4	US-08-387-707-12	Sequence 12, Appli
78	242.6	21.0	1317	1	US-09-016-434-1446	Sequence 1446, Ap
79	229.6	19.9	1205	1	US-08-417-103-13	Sequence 13, Appli
80	229.6	19.9	1634	1	US-07-816-283-1	Sequence 1, Appli
81	229.6	19.9	1634	4	US-08-417-103-1	Sequence 1, Appli
82	229.6	19.9	1634	4	US-09-016-434-1302	Sequence 1302, Ap
83	226.6	19.6	1265	1	US-07-816-283-3	Sequence 3, Appli
84	226.6	19.6	1265	1	US-08-417-103-3	Sequence 3, Appli
85	221.2	19.2	1244	1	US-07-816-283-7	Sequence 7, Appli
86	221.2	19.2	1244	1	US-08-417-103-7	Sequence 7, Appli
87	219.4	19.0	2518	4	US-09-743-871B-10	Sequence 10, Appli
88	214.8	18.6	1147	1	US-08-417-103-15	Sequence 15, Appli
89	214.8	18.6	1351	1	US-07-816-283-5	Sequence 5, Appli
90	214.8	18.6	1351	1	US-08-417-103-5	Sequence 5, Appli
91	214.8	18.6	1351	4	US-09-016-434-1303	Sequence 1303, Ap
92	210.4	18.2	1002	4	US-09-170-496B-15	Sequence 15, Appli
93	210.4	18.2	1518	4	US-08-148-215A-3	Sequence 3, Appli
94	210.4	18.2	1518	4	US-09-016-434-1480	Sequence 1480, Ap
95	207.2	18.0	1002	4	US-09-170-496B-171	Sequence 171, App
96	204.8	17.7	441	4	US-09-530-880-5	Sequence 5, Appli
97	175.6	15.2	987	4	US-09-170-496B-11	Sequence 11, Appli
98	175.6	15.2	1054	1	US-08-148-215A-1	Sequence 1, Appli
99	175.6	15.2	1596	4	US-09-761-962A-3	Sequence 1479, Ap
100	172.4	14.9	987	4	US-09-170-496B-169	Sequence 169, App

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